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COUNTRY LIFE

OFFICES:

20, TAVISTOCK STREET, STRAND, LONDON. W.C.

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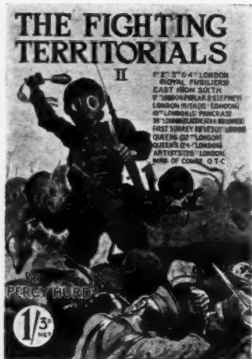
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COUNTRY LIFE

VOL. XL.—No. 1024.

SATURDAY, AUGUST 19th, 1916.

PRICE SIXPENCE, POSTAGE EXTRA.
[REGISTERED AT THE G.P.O. AS A NEWSPAPER.]



ELLIOTT & FRY.

THE MAHARANI OF TIKARI.

55, Baker Street, W.

COUNTRY LIFE

THE JOURNAL FOR ALL INTERESTED IN
COUNTRY LIFE & COUNTRY PURSUITS

OFFICES:—20, TAVISTOCK STREET, COVENT GARDEN, W.C.

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. We appeal to our readers to send their copies of recent issues of COUNTRY LIFE to the TROOPS AT THE FRONT. This can be done by simply handing them over the counter of any Post Office. No label, wrapper or address is needed, and no postage need be paid.

The War Office notifies that from now onward all papers posted to any neutral European country will be stopped, except those sent by publishers and newsgatherers who have obtained special permission from the War Office. Such permission has been granted to COUNTRY LIFE, and subscribers who send to friends in Denmark, Holland, Norway, Sweden, Switzerland, Spain, Portugal, Greece, Roumania, neutral countries in America, and the Dependencies of neutral European countries in Africa, should order copies to be despatched by the Publisher from 20, Tavistock Street, Covent Garden, W.C.

Artificial Manures and Increased Profits

IN the course of exploring those rivulets of increased and successful activity which we hope one day will swell and unite in a great tide of revival in agriculture it has been most instructive to note that where success is most pronounced it has been due to two main causes in addition to that skill in husbandry which is essential. Labour-saving machinery is used to save expense. Artificial manures are bought to increase the profits. It is a just complaint that the latter are not used with sufficient freedom, but this generalisation may easily be misinterpreted. There are English farmers who have very little to learn on this subject as long as they confine their enterprises to land which has been long in cultivation and to standard crops.

For instance, it was stated that the well known firm of W. Dennis and Sons pay a single firm of manufacturers on an average about £8,000 annually for chemical manures. The world might be searched in vain for more famous potato growers. But "The Northern Farmer Old Style" has not yet arrived at that stage. He adheres to the formula of a local celebrity who on being asked how he managed to obtain such excellent crops was wont to reply, "Plenty muck, plenty gud muck, Sir." Not a bad answer either, if only there were not a general tendency to substitute mechanical for animal power. Even what farmyard manure there is suffers from the effects of bad keeping. It is left exposed to the weather till the best of it soaks into a roadside ditch or the untilled earth. An increasing number of farmers understand how necessary it is to avoid this waste and have tanks for the liquid and covered yards for the solid; but they form only a small minority.

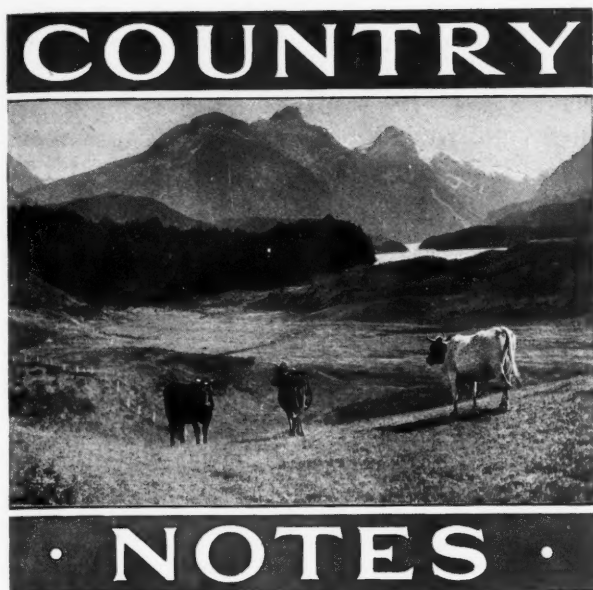
No doubt a stumbling block in the way of many is the increased care which the use of artificial manures demands. Here farmyard manure has a great advantage. It is almost impossible to do harm by using it at any time and in any quantity. The careless hind who tosses it on to the vacant land as it comes from the stable will certainly not obtain the best results, but he will still produce some improvement in his crops. Very much more care is demanded in handling artificials. Some, like nitrates and potash, if applied at the wrong time, evaporate without exercising any influence on the returns; others, like basic slag, are not infrequently washed out of the soil and carried off in flood water, if used at the wrong season. Indeed, a demand upon intelligence is made by them from the moment of purchase. Snare are set profusely for the unwary, and the wise husbandman will be well advised to protect himself by demanding a written guarantee with his goods and buying according to the value per unit. It would be of great advantage if the Board of Agriculture would take practical steps for helping the young farmer in this respect. Of course, one knows all about their leaflets, but they are not enough. The farmer should be encouraged to keep an experimental plot of his own going. When he is able to demonstrate to his own satisfaction the use of artificials he will need no urging to employ them. Also it would be to the good if school children were induced to try applications in their school garden plots.

Their elders who do not happen to have familiarised themselves with the purchase and application of artificials cannot do better than get a copy of Mr. Vendelmans' "Manual of Manures," which we published a few weeks ago. It is a well put together and alphabetically arranged account of practically every fertiliser that is needed. The author ought to know something about the subject because he was brought up in the very midst of reclamation work and imbibed his knowledge of these materials, one might almost say, with his mother's milk. It has been part of the business of a lifetime to make use of them, and his practical knowledge is backed up by all that a university could impart in the way of agricultural lore. Now any man can go into a stable or a pigsty, collect the manure there, and put it on the soil; but exact information is needed by those who make use of chemical manures. First, it is sound business to acquire an understanding of the origin of these products—what they are made from and how they are made, and what materials are added by the dishonest dealer to swell the bulk without adding to the value. It is also necessary to understand the operation of the manure and the effect produced upon it by different types of weather. A very important fact to be kept continually in mind, which is too often neglected in actual work, though it is a truism to the expert, is that no manure is of value until it is soluble, and the solution very frequently depends upon temperature and other characteristics of the weather. So that a manure which may be very efficient in springtime, when the earth is naturally forming nitrates, may be useless or worse than useless if applied in mid-winter.

Our Frontispiece

OUR frontispiece is a portrait of Her Highness the Maharani of Tikari, whose husband has been serving in France and is wounded.

. It is particularly requested that no permissions to photograph houses, gardens or livestock on behalf of COUNTRY LIFE be granted except when direct application is made from the offices of the paper. When such requests are received, the Editor would esteem the kindness of readers if they would forward the correspondence at once to him.



COUNTRY

NOTES

IN one of Sir Walter Scott's novels there is given a life-like verbal sketch of one of "the gentle Johnstones," a Border reiver, or robber, performing some knavery upon a quiet citizen, and when pursued grinning like a fiend as on his lean steed he skimmed the moss and marsh like a wild duck. No ordinary horseman could have threaded his way through these pitfalls. Mr. Asquith in the House of Commons irresistibly reminds us of the gentle Johnstone; not by any means because he is a reiver or addicted to any kind of knavery, but because he can skim his way through the Parliamentary difficulties as easily as the Border robber threaded the physical difficulties of the morass. On Monday afternoon the Prime Minister was seen at his best, because confronted with a host of Parliamentary difficulties. He had to obtain for himself and his colleagues a new lease of life and this from a House which has been modified by a considerable number of re-elections since it was first brought together on a pre-war basis. There was the difficulty of the new register and the not less formidable one of franchise reform mooted and asked for by various sections, and there was the question of women's suffrage, which is supported on an angry sea of feminine discontent.

WHAT would have dismayed some men only stimulated the Prime Minister to an extraordinarily good display of mental gymnastics. In his speech parliamentary tact touched its zenith. Whatever may be the hidden dissensions of the Coalition, they were beautifully glossed over. Who with common sense could deny that it would be most imprudent to swop horses while the most turbulent portion of the flood of war has yet to be crossed? At this moment, when the energy of Ministers should be wholly concentrated on the great problems of the war, what folly it would be to introduce great and controversial topics of franchise reform which would divide House and country into distinct and antipathetic groups. With the demand that those who are serving their country as soldiers or sailors, or even as munition workers, should on no account be deprived of the right to vote, Mr. Asquith was all sympathy. But, then the difficulties, the practical, absolute difficulties that stand in the way of men recording their votes from the front. These had to be grappled closely for their full force to be apprehended. So the wild duck skimmed lightly over this dangerous bog! To the women Mr. Asquith was suavity itself. Hitherto he has been the uncompromising opponent of women's suffrage, but then how splendidly these women have been serving the State as munition workers, as agricultural labourers, as nurses and philanthropists! Really, they had made out a case for a reconsideration of his views. And so with gentle tact he avoided that snare also.

IT seems very probable that strong measures will have to be taken with those responsible for the upward leap in the price of wheat. There is no substantial reason for it that did not exist before. The world's supply is good, if shorter than it was last year. Harvest is now in full swing, and in the natural course of things there should occur a considerable drop in the price before many days go past. Sixty-five shillings a quarter is not justified by the conditions. We

perfectly understand the difficulty of finding tonnage, the lateness of the European harvest, and the other circumstances which might very well have operated to prevent wheat from falling below 50s. or even 55s.; but the rise above that appears to be the result of a gamble in the United States. A Mark Lane corn factor is probably right when he asserts that "the whole thing seems to have been engineered in America for the purpose of forcing up prices." The object of the operators is probably to sell the remains of last year's harvest as well as to make an artificially high market for that of this year.

LAST week was a highly important one for the Allies and afforded a lesson in warfare that all can understand. Pressure was exerted on every front of the Central Powers. In the West there was hard fighting all the time. The Germans are evidently of opinion that the final decision will be made on this front. They have concentrated their best troops and yet, point by point, yard by yard, and mile by mile they are being steadily pressed back. On the Italian front the capture of Gorizia stands out as one of the great events of the war. It is enabling the Italians to push on. The anxiety felt at Budapest and Vienna bears testimony to what Austria thinks of General Cadorna's success. In Galicia a mighty duel is being fought between two pronounced champions whose personalities have emerged from the crowd. One, of course, is Hindenburg, and the other Brusiloff. The latter's aggressive energy is bearing rich fruit—"I hate lulls," he is reported to have said. Now that Bothmer has been forced to retreat the whole of the supposedly impregnable defences of the Austrians, formed during the long winter months, has been turned. Kovel is seriously threatened, and Hindenburg's order that it is to be defended to the last man and the last ditch indicates the importance which the enemy attaches to this railway centre. The activity of General Sarraill at Salonica and General Archibald Murray's brilliant defeat of the Turks complete the work of the gigantic machine which is steadily and ruthlessly crushing the enemy.

AT THE END OF THE DAYS.

I waited near thee, when the parting came,
O sacred one, a moment more to feel
The beauty of thy soul about me steal,
As on thy lips in blessing shone God's Name.
The pain of separation was not yet,
Too solemn was the pause within the heart;
Or was it Heaven's Veil that drew apart,
My hope upon Eternity to set?

I know not. But I know a change intense
Breathed from thy presence and enfolded me
As in some trembling, great expectancy.

Thou wert transfigured—And through every sense
I now can feel the messaged mystery
That so wilt thy resurgent body be.

LILIAN STREET.

THE extraordinary amount of lying now being done by the enemy is what the journalist would call "phenomenal." Everybody living in England can see how the Germans concoct the most extraordinary stories about their Zeppelin visits to this country. It has been officially announced so often that London is devastated that the inhabitants of neutral countries must wonder if there is a street left standing. As a matter of fact, not a single Zeppelin has been allowed to reach London since the great raid last October, and the tales of lighthouses being destroyed, munition works blown up, and the rest of it, are inventions so flagrant that it would not be worth while for our own Press Bureau to issue a denial, were it not for friends abroad who might possibly be misled. They must find it difficult to believe that a Government like that of Germany, which used to be considered grave and responsible, should have fallen so low as to issue falsehoods of this kind for the purpose of influencing neutral opinion. The Turks are equally false in their description of the recent fight; but they have no character for veracity to maintain. The Turk's imaginativeness in narration is almost a proverb. Germany, however, and Austria might have been expected to have the courage to tell the truth to their people.

FROM a Flemish paper we learn that agriculturists are not doing badly in Belgium at the present moment. In fact, the farmers are prospering so well that some owners are taking advantage of this fact to increase the rent of the fields. It is a common practice in Belgium for a farmer to hire

portions of land from various owners. A considerable number of them have been able to buy the land that they had cultivated for many years previously. This state of things has had a stimulating effect upon reclamation. Committees are being largely organised and help is given under very definite conditions for each rood of land which is brought into cultivation. In Belgium, as elsewhere, this movement is being strengthened by the exigencies of the great struggle. At the same time, the Belgians are not allowed to forget that they are under foreign dominion. Next month a general estimate of the crops will be made by the Germans, who will then commandeer at a fixed price the proportion that they intend to have for themselves.

REGIMENTAL *esprit de corps* may suffer a little by the creation of the new Training Reserve, but this development of our military organisation was inevitable. Variation in population between one regimental district and another, differences in the intensity of local patriotism and the high popularity of certain regiments, all these reasons caused inequalities in the strength of reserves and hindered the efficient working of the draft system. Some battalions at the front either became mere skeletons for lack of reserves at the Home depôts or were brought up to strength by attaching companies from other regiments: both alternatives were very unsatisfactory. On the other hand, there were regiments whose depôts were overflowing with reserves of trained men kept back from service at the front because the fighting battalions were at full strength. The whole system was woefully inelastic.

THE scheme of the new Training Reserve smooths out these inequalities, but the old system of Reserve Battalions is also kept in being. The original Special Reserve (the old Militia) the senior extra Reserve (which has been filling up the Service Battalions) and the Territorial Reserve Battalions will be retained and brought up to full strength. The second and third Reserve and local reserve Battalions will be merged into the new Training Reserve which will be divided into new numbered battalions. The old regimental Reserves will have the first call on recruits; but all surplus men will be trained in the Training Reserve and will be drafted therefrom into fighting battalions if the regimental Reserves cannot supply all needs. The worst that can be said of it is that the individual soldier may be prevented from developing the regimental spirit until his training is completed. That is a small disadvantage compared with the simplicity and efficiency that are brought into recruiting and training. The Army Council is to be congratulated on having achieved this end without serious disturbance of the regimental idea.

THE DUKE OF SUTHERLAND has made a princely gift to the nation. It was one of the first tasks of Mr. Tennant to announce this to the House of Commons in his new position as Secretary for Scotland, and surely it was a very happy beginning to his tenure of that office. The Duke has given 12,000 acres of land for the settlement of soldiers and sailors after the war. The Government are going to put up, with their proper buildings and equipment, twenty homesteads, and they are also planting 5,000 or 6,000 acres with trees, so that a winter occupation may be provided for the small-holders. For the first two years the State will be called upon for a capital expenditure of £20,000, but this in due time will come back to it as rent from the tenants and revenue from the forest. The land is situated at the very North of Scotland, but then our soldiers and sailors have been gathered from that district as well as from others, and no doubt many of them would like to farm in a neighbourhood they know.

A RESULT of the successful farming operation described in last week's issue as having been carried out by Professor Somerville at Poverty Bottom is not unlikely to be some action on the part of the Government. The story was described by the writer as being inevitably a hymn to the glory of basic slag. There are great stores of this fertiliser lying in what are practically rubbish heaps, and a suggestion has been made that the Government might encourage the production of food by purchasing for the farmers a sufficiency to give all pasture that needed it a thorough dressing. This need be no gift, as, though there are many farmers who would not be able to provide the total sum needed at once, they could all repay the outlay in instalments. The expense would certainly be returned in the shape of increased production.

WHILE the rain was very welcome after the weeks of dry, hot weather its threatened continuance would be a grave misfortune. The cereal crops are very late this year. As yet only the oats have been cut and here and there a little wheat, so that broken weather might well spoil a harvest the prospect of which has been enormously improved by the spell of fine weather. As far as can be judged, there is no chance, even under the most favourable conditions, of the crop being up to the average, but it would have fallen very slightly below the line if luck had come the way of the farmers in the shape of plenty of sunshine interrupted only by occasional showers. Of course, nothing is lost yet. Hay has proved a most abundant crop. Grass is abnormally plentiful, and the prices of livestock higher than they have ever been in living memory. The anxiety for the moment is for the wheat.

GARDENER, GARDENER.

Gardener, gardener, why are lilies white?
Why are pansies purple and sunflowers yellow?
And why do meadow daisies hide their faces every night?
The gardener lifts his water-can and smiles, the honest fellow,
And shakes his head, and sprays the bed;
The only thing he knows is
To-morrow at the flower show he'll win the prize for roses.

Lady, lady, who is home from France?
Say what makes your pretty cheeks flush so soft a pink?
And tell me why you turn your face from anybody's glance?
My Lady picks her racket up and says she cannot think.
But none the less, not hard to guess
The tale her blush discloses!
And may she win the greater prize who owns the rarer roses.

W. G. S.

TOWN PLANNING needs, though not altogether forgotten, are quite inadequately recognised in the Dublin Reconstruction Bill, presented to Parliament by the Home Secretary. The Corporation is authorised "to make bye-laws in respect to the structure, materials, design, alignment and general symmetry of new buildings" in the area destroyed during the rebellion, but there is nothing to show who will draft these bye-laws. No great respect can be paid to the aesthetic judgment of a Corporation which refused the late Sir Hugh Lane's munificent gift of an Art Gallery to a design peculiarly distinguished. Dublin has not had so great an architectural opportunity for over a century, and it will be grievous if it is wrecked by artistic problems of much complexity being left to the municipal staff to settle.

WE may well ask what the Home Secretary is going to do about it. Mr. Samuel has been President of the Local Government Board and cannot be unfamiliar with the fact that town planning and street design call for the utmost architectural skill. Dublin architects are crying for a committee of taste on which art as well as commercial needs shall be represented. The city will be ill advised, indeed, if it does not call in the best advice available in Great Britain as well as in Ireland. Here is occupation for Mr. John Burns, the author of the Town Planning Act. He emerged from his two years' silence to fight in the House of Commons against the perpetuation of the Charing Cross Railway Bridge, and won the fight for a more beautiful London. Surely Dublin would welcome his expert aid as Chairman of an Advisory Committee charged with the duty of co-ordinating the demands of art and business.

FROM the statistics compiled by the Liquor Control Board it would appear that the restrictions on drinking which have been carried out in munition areas are having a wholesome effect. Drunkenness as a crime is very greatly decreasing. During the first six months of this year the average weekly number of convictions in England was 835, as compared with 1,558 in the same period of 1915. Scotland, too, in spite of what one of her own poets said, is becoming sober by Act of Parliament. There were on an average 454 weekly convictions in the first six months of the year, as compared with 754 in the year previously. In England and Wales there was a diminution of 600,000 barrels of beer in the first six months of this year as compared with last, and 11,254,933 proof gallons of spirit were cleared for home consumption in the first six months of the year, as compared with 13,258,058 gallons in the same period of last year. These criminal statistics agree with those relating to the sale of intoxicants.

THREE KASHMIR FLOWERS

By C. M. VILLIERS-STUART.

THE strange beauty of Kashmir—that cool, green middle land fenced off by a ring of snow peaks from the quivering, colourless heat of Upper India and the arid outer bareness of Ladak—depends to no small extent on its flowers. All spring and summer long the mountain “margs” are gay with flowers. As the snow melts the little yellow crocus traces out in veins of gold each fold of the meadows where the moisture runs away. Groups of carmine-striped white tulips next appear. They shelter under the edges of the fir woods from the keen, bitter wind which comes whistling down over the glaciers and their rushing ice-bridged streams. Soon on these high uplands the pageant of the year begins and the smooth green “margs” are quickly lost, merged in a vast alpine mosaic.

The flowers of the Kashmir plain are not nearly so numerous, but what they lack in variety they give back

of some long forgotten village, as it crumbles down green mound on green mound, is always the iris on the graves—*Gul-i-mazâr*, “flower of graves,” is its name.

Elsewhere in the Mahommedan world other plants share this privilege. In Turkish cemeteries a variety are used; blue flowers on the grave of a man or woman represent the blue flame of the intellectual life; everlasting flowers mark the last resting place of a soldier of the Faith, whose Heaven is assured. There, a lily in any form shows the tomb to be a woman's, and the white iris, as the special token of innocence and purity, denotes the grave of a young girl.

The exclusive use of the iris in Kashmir suggests, like so many old customs, the lingering symbolism of an earlier faith, and, curiously enough, the trefoil of its petals forms the emblem of the *Trimûrti*, the Trinity of Buddhists and Hindus. The Taj itself, the tomb of the lovely Moslem Empress, Mumtaz Mahal, is crowned by this sign. In Kashmir



W. J. Clutterbuck.

ROSE LOTUS (*Nelumbium speciosum*).

Copyright.

in their concentrated wealth of bloom. Each month almost, has its characteristic flower. May, June and July are the months of the iris, wild rose and lotus. To the Mahommedan conquerors of the valley whose art, restricted by the edicts of the Koran, centred itself in the garden, Kashmir was Paradise regained, and among all its flowers those of May and June, the iris and the rose, were preferred. On embroidered coverlet and curtain, on carved lattice and beam, in the beautiful old craftwork of the country in its modern dilution to meet present day taste, the iris inevitably appears. The bold silhouette of its double trefoil rivals the chenar leaf as the most popular among decorative forms; one naturally expects to see the large flowers themselves growing wild on every side. It comes as rather a surprise to find that, after all, the wild irises are quite small, such as the sky-blue *Iris ensata* which in April widens the margins of the pools and lakes, or the little purple mountain iris. The big bearded iris, in Kashmir at any rate, is only found where there has once been cultivation; the last relic

villages, however, there are no formal tombs; in the central open space surrounding the small cedar-wood shrine the dead lie very close to the living. But in spring when the iris plots are in bloom and the frail transparent flowers stand out against the dark lattice background these humble cemeteries reflect for us the radiance of their planter's Paradise.

As well as the favourite white iris—the sweet-scented Kashmiriana, the best of all the whites, but, unfortunately, not quite hardy in most parts of England—there is also a rich purple which comes out a week or so earlier. This is the flower so frequently planted on the flat Kashmir roofs, which are coated with a layer of turf laid on birch bark. Together with the scarlet tulips it makes a wonderful display, or growing alone on the house tops its green leaves and purple petals against the bright blue sky give the cool, delicious colour scheme of the Persian flower tiles. The last to come out of the large irises is a tall-growing mauve of the pallida variety, but this does not seem to be very plentiful. I have only seen it dotted here and there, its

colouring and its long stalk making a conspicuous break among the white flowers.

High on the mountain side above the Dal Lake stands the Pari Mahal, the Palace of the Fairies. With its brown brick arches showing up boldly on a spur between two ravines it forms an arresting and puzzling feature. What its original purpose was and why it was perched in such an inaccessible place is a matter of conjecture and dispute. Some say that it was built as a college, such as that of Humayun's tomb, others that it was placed so high for the better unravelling the wisdom of the stars; that it was, in fact, the Royal observatory, where days good and evil were foretold. Now, though the walls and arches stand, all vestige of their garden-courts has disappeared. But the fairies, not to be outdone by time, have planted a garden of their own; on every terrace the irises grow thick, and the pink wild roses climb and hide the crumbling plaster walls.

The *Rosa Webbiana* is, next to the iris, the most characteristic of Kashmir flowers. It is named after Captain Webb, who first discovered it in the province of Kamaon and sent specimens to Wallich, who distributed them. With its close, compact growth, its prickly stems, and its concentrated mass of bloom, this lovely rose gives to the distant hill slopes the air of being clothed in bright pink gorse. At Samarkand, in a high, dry country, I believe its form is even yet more dense. As June glides into July the pink roses fade, but the white rose, *Moschata*, is then at its best. This is the rose Parkinson figures as *Rosa hispanica moschata simplex*, and its glossy leaves and flowering sprays form a direct contrast to *Rosa Webbiana*. It flowers later, for it loves the cool air and the shade of the mountain valleys; the high woods are full of its delicate perfume, where it climbs up the pine trees and strays over the boulders, its long trails falling in creamy white cascades.

Down in the main valley one by one the flowers droop and wither. By the middle of July even the grass takes on the dusty drab of the Indian plains, where only the toughest and most prickly plants, the cactus and aloes, survive under the fierce summer sun. In the old Mughal gardens round the Dal Lake the system of irrigation, on which their plan is based, permits a bright wealth of autumn flowers, but once outside their terraces and high enclosing walls the country



FLOWERS FITTING FOR A SHRINE (MAKDUM SHAH'S ZIARAT).



W. J. Clutterbuck. GUARDIANS OF A LONG-CLOSED GATE (*Iris Kashmiriana*).

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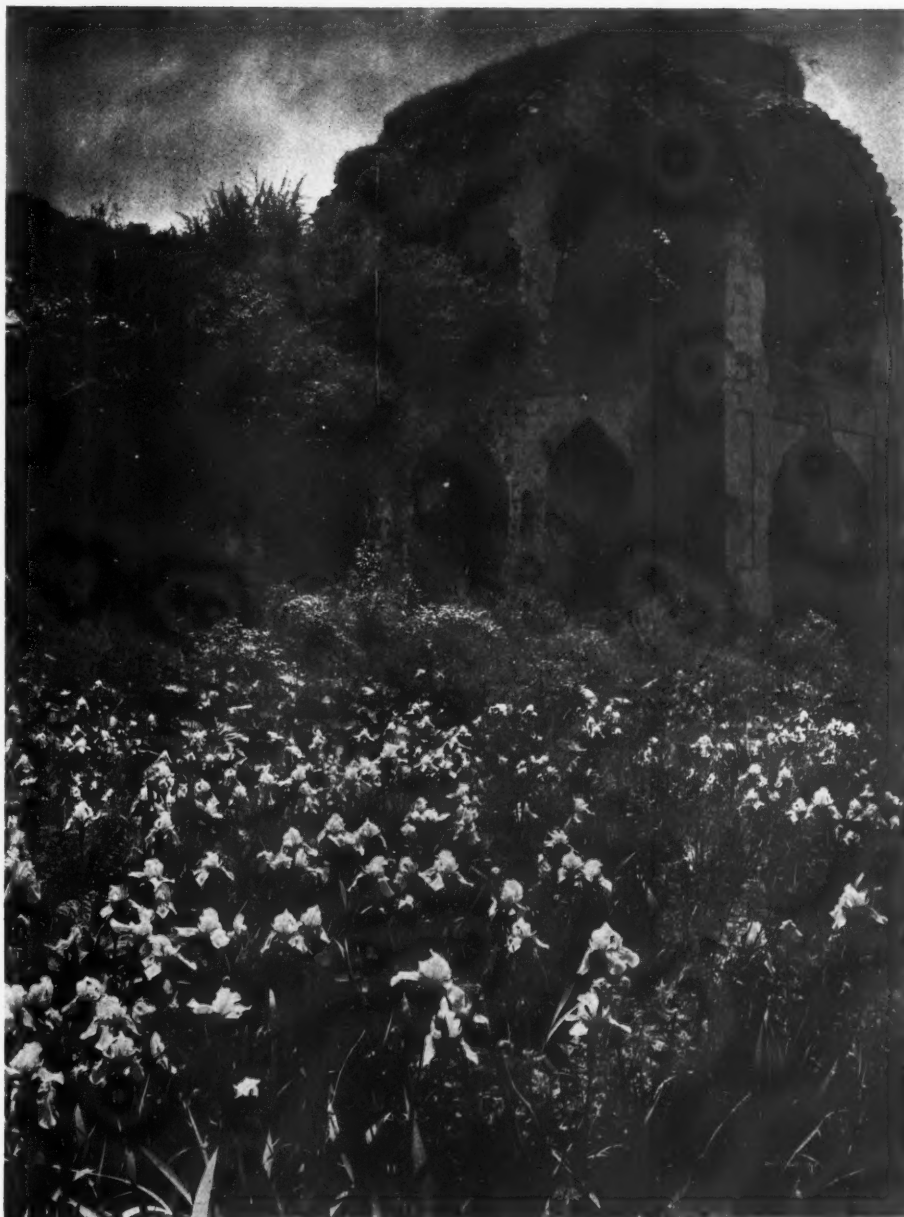
fields are desolate and bare. Alone among wild flowers the lotus triumphs, floating safe on the clear blue water of the lake. To see the rose lotus, *Nelumbium speciosum*, at its best, one must row out at dawn to where it grows, and there wait until the sunbeams rise over the pearly grey mountains and steal across the calm shadowed water, opening the lightly closed pink buds. The lotus is not only very popular with Hindus, but it is also a sacred emblem. One day the lotus fields are gay with the large rose-tipped flowers, the next hardly a blossom can be found hidden away among the curving grey green leaves; they have all been carefully picked for a holy day at the temple or to grace some festival at the Maharaja's palace. Later on what remain of the decorative green seed-pods are gathered and sold as vegetables in the bazaars.

Both the white species, *Nymphaea Lotus*, and the blue *Nymphaea caerulea* are sacred to aspects of the Trinity. But the pink lotus is Brahma's special flower. Rising on its long stalk from the mud of the lake bottom to expand in all its rose and golden beauty in welcome to the morning sun, it forms one of the earliest natural symbols of the soul rising from earth to God. *Aum Mani Padme Hum*, "Hail Lord Creator the Jewel is in the Lotus," is the oldest and most sacred Indian prayer.

From Hindu and Buddhist India the rose lotus travelled far. It was taken south and east to Java, China and Japan, and north and west to Turkestan and Persia. No doubt it was the Buddhist missionary monks who brought it to the valley of the Nile, for though the white *Nymphaea* had been common there since the earliest times, the rose lotus is believed to have been introduced only in the days of the Ptolemies. (See "*Les Plantes dans l'antiquité*," by Professor Joret.) From Egypt through Syria to Byzantium the flower made its way, if not in actual life, at least in realistic representation. The art of Eastern Christendom borrowed freely from its Oriental neighbours and Christians claimed the lotus as well as the iris and the lily among the flowers of the Virgin. The finest in the series of splendid floral mosaics that are the glory of the great fourth century basilica of St. Paraskevi, the Church of Our Lady of Salonica, is that lining the central western arch, which represents with delightful truth in every detail of flower, leaf, and seed-pod, the rose lotus of Kashmir.



CLOTHING THE RUINS (MARTUND).



W. J. Clutterbuck. WILD IRIS FILLS THE PALACE COURTS (PARI MAHAL). Copyright.
Iris Kashmiriana and Rosa Webbiana.

SAND DUNES AND COAST EROSION

SITTING among the bents or marram grass on the coast at Holkham Gap, my thoughts turned naturally to the hard game which man has played so long against Nature. On this typical summer morning the forces against which we fight were reduced to gentleness. The "dreadful heaving of the deep" had sunk to a low continuous moan. A thin line of creamy white showed where summer wavelets were breaking on the low shore. The tide was at ebb, and in its retreat had left bare acres of wet sand. They were bounded by the characteristic links of the East Coast, ridged and billowing hillocks of sand overgrown with rough grass, save where the sand appeared in bare whitish patches. Behind was the sheltering belt of firs through which the warm breeze sighed and swished softly. Yet perfectly peaceful as was the scene, it was full of latent threat. This same whispering wind held the potency of storm and fury. Vexed by it the sea would dash sand-laden waves against the low shore. Imagination travelled backward to the time when Nature did its worst and man had to be content with what he could get. The wind had its own way in those days: it dried the sand heaved up by

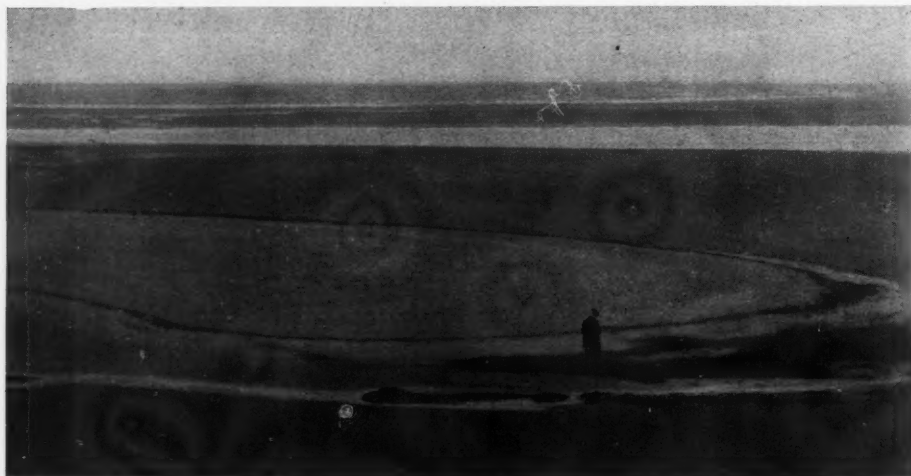


SAND RIPPLES.

the sea and drove it inland, barrenness and waste in its train. It blew across undrained bog and swamp. Hard to believe, yet absolutely true, is the fact that these fertile meadows whereon the fat cattle to-day lie and chew the cud were then mere stretches of sand and marsh sustaining nothing except a few wild rabbits. Rising above the green conifera, the top of a monument is a conspicuous object. This was erected about 1848 by the

tenants and occupiers on the estate to Coke of Norfolk, who did so much for the reclamation of the soil. It is a very appropriate memorial, with its fat cattle and sheep, its sheep-shearing scene with the smocked labourers and gentlemen in the cut-away coats of the period, and, above all, the powerful figure of Coke. What he did his old enemies the sea and wind now second and strengthen. The dunes outside the shelter belt are increasing seaward. Marram grass has been planted to hold together the sand, and the latter, instead of drifting inland, now steadily accumulates. Blown against the dune it is taken possession of by the marram grass, and is thus on its way to become part of the fertile land. Over 250 acres of sand wastes have been planted with pines, which greatly help the accretion of fruitful soil over the sands, and this is further helped by the seeding of the trees, especially of the Corsican pines. The seedlings thrive amazingly as long as of less height than the sheltering bank, making an average growth of about a foot. This rate of development is checked as they rise above the sand and are exposed to the sea winds. It would appear, too, that they begin to suffer as their roots penetrate downward to the sandy subsoil permeated with salt water.

The great reclaiming agency is, however, the marram grass, the rougher sorts of which grow here with great vigour. There are several



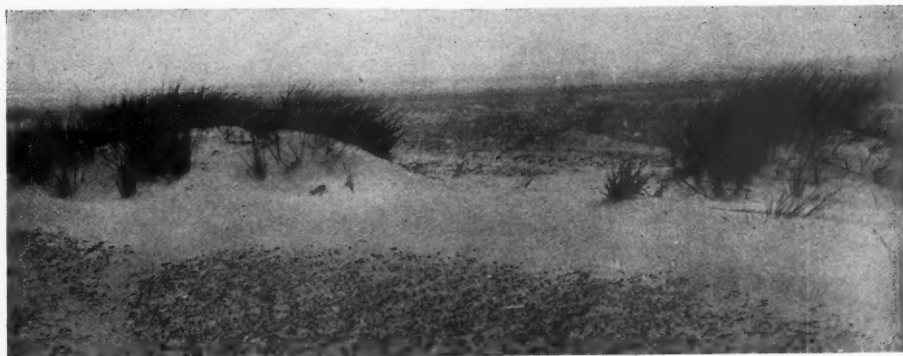
THE BEGINNING OF A HILL.



A YEAR'S PROGRESS IN FORMATION.

Note the growth of the neck.

sorts, such as sugary marram and a smaller grass very green and of creeping habit. Bents are occasionally planted, but are most interesting when they owe their being to natural propagation. How a particular dune is started cannot always be ascertained. Where the inland sand drift is stopped by a shelter built of trees and a high bank, the dunes begin to march slowly seaward. No longer carried away from the coast, the sand heaps itself on the hills. In its fresh state it is taken possession of by the deep-rooting marram which only dies away when cut off by the supply of fresh sand. It is greenest and strongest on that part of the dune which is nearest the sea. As the latter retires from it, the vigour of the plant departs. It discovers



MARRAM STARTING A DUNE.

The prevalent winds are from the sea and they are more effective in moving sand than those from the shore. Thus, if a wild sea bank is formed naturally, the tendency is for it to grow seaward unless, as occasionally happens, a

terrific storm comes and the furious waves effect a break in the barrier. Growth of this kind is steadily going on within a short distance of Holkham Gap, further along the coast in the direction of Wells, and close beside a row of bathing machines set up by inhabitants of that little town. For some reason not quite apparent the marram grass has stolen far out from the original dune and it is seen growing in several green clumps. What follows is that the sand and the marram begin to rest on one another. The marram obstructs the drift of sand which begins to form a little heap to windward and a long brown broad bank of sand to leeward. The new accumulation affords new foothold for the marram: which, spreading and growing, offers a constantly increasing coherence to the sand that in its turn offers fuller scope for the growth of the plant.

Thus in time dry land is formed on places over which the tide used to surge, and if the process is not interrupted the sea will by its action add in time a new area to the cultivable soil.



THE GRASS ESTABLISHED.

new ground in the sand which impelled, against the dune, falls back on the seaward side. As the irregular-shaped dune rises in height it modifies to a greater or less degree the currents of the wind, and these in their turn deposit the sand in rippling forms. "The shape of wind-formed sand dunes," says Mr. Cornish, "when not interfered with is much the same as that of sand ripples." Dr. Vaughan Cornish by experiment discovered that the ripples on sand were caused by the grains being heterogeneous; that is to say, of varying shapes, sizes and weights. They "are formed by the eddies which are created on the lee-side of the larger grains and which carry away the smaller grains and form the surface in parallel ridges."

Wherever there is a low sandy coast there is a tendency to form sand dunes above high-water mark of ordinary tides. A quantity of wet sand is thrown up by the incoming tide. At ebb, particularly in sunny breezy weather, this dries and is then blown about by the wind.



A BANK IN PROGRESS.



YOUNG GROWTH ON THE LANDWARD SIDE.

Sand will be gathered and in the course of time a complete bank will form.

Close to these patches a still more remarkable phenomenon can be studied. To make it intelligible, something must be said about the conformation of the waste. The space over which the tides spread is a huge expanse of almost level sand, such as may be seen at many parts of the East

Coast—Mablethorpe, for example, or the Goswich Sands in Northumberland. But towards the land there is a wide depressed space which the waves would have to climb up before they filled, were it not that a channel has been formed at the Wells end and the water at high tide pours in by the



ROLLING MOUNDS OF SAND AND MARRAM.

avenue. In doing so it has gradually, during the course of many years, formed a huge platform of sand. This is a bit of natural building which has been done in an extraordinarily thorough and enduring manner. Closely examined, it is seen that the sand has been formed in thin layers very much in the same way as we imagine chalk rock is formed

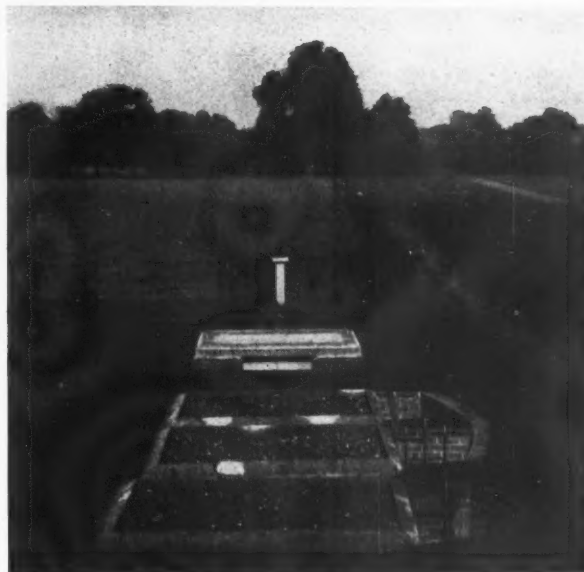
on the ocean floor. At first the platform extended parallel with the coast as well as towards it, but this action appears to have ceased and the building up is confined to enlarging the mass so that it comes nearer and nearer the mainland. Since 1892 a progress of nearly fifty yards has been made, and it cannot now be long before a junction is effected.

THE PRESENT WORK OF THE ROTHAMSTED EXPERIMENTAL STATION

BY DR. E. J. RUSSELL.

IN COUNTRY LIFE for June 17th there appeared an account of the Rothamsted Experimental Station from its small beginnings in a barn to the present admirably equipped laboratories and fields. It is proposed now to describe the character of the work going on there. It is necessary, in any description of Rothamsted, to go back to the forties, when agricultural science was in its infancy and when farmers were reaching the limit of progress possible on the empirical methods then in vogue. From mediæval times to near the middle of the eighteenth century arable farming and animal husbandry had been mutually antagonistic; the wonderful development of sheep-breeding in the fifteenth and sixteenth centuries had only been obtained by laying down land to grass in a wholesale manner and displacing the labourers. It was the great triumph of Townshend and Coke between 1730 and 1790 to show that sheep-farming was perfectly compatible with arable farming and, indeed, on light land was a safe method of ensuring success. Farmyard manure was practically the only fertiliser, and agricultural improvers devoted great efforts to try to increase the quantity available. Good farming and abundant supplies of farmyard manure were looked upon as synonymous terms.

In 1840 Liebig startled the agricultural world by stating that farmyard manure was not really essential to crop production; all that was wanted was the ash left when plants were burnt; for the rest the crop could draw on the illimitable supplies of nitrogen, carbon dioxide and oxygen in the atmosphere. On certain points, Lawes, then a young man of an independent mind, was unable to agree, and from the controversy that arose there emerged the general truths that crops could be grown perfectly well without farmyard manure, and that they required only nitrates (or ammonium salts), phosphates, potassium and a few others to give abundant yields. Thus the farmer was not restricted to farmyard manure, but could use these other substances with advantage both to his crops and himself. Liebig had taught that the combination of these constituents best suited to the crop as to be found by analysing the crop itself. If a plant takes



DRAIN GAUGES AT ROTHAMSTED.

For studying the amount and composition of drainage water.

up certain constituents in a certain proportion, he argued it must be because the plant requires them in that proportion. Later work has shown that this is not so; the plant takes what it can get, but does not necessarily get all it wants; nothing but actual trial will show its needs.

The great feature of the Rothamsted experiments, therefore, has been to find out by direct trial what are the requirements of plants. The investigation has to proceed on systematic lines, otherwise it would speedily degenerate into mere haphazard trials. In an old established laboratory like Rothamsted there is always some clue given by earlier experiments or gained by previous investigators, and much of the work in practice consists in following up the clue to see where it leads. The botanist, for example, has reason to suppose that a certain substance is beneficial to plant growth and proceeds to find whether or not this is the case. The obvious method of putting some of the substance into the soil and seeing what happens is not altogether reliable, because the chemist is able to show that the substance may affect the soil or suffer important change there. The first experiments are, therefore, carried out in water cultures—a solution is made containing all the plant nutrients in proportions shown by experience to be satisfactory, and this is divided into several lots. One lot remains as control; the others



A MANURIAL EXPERIMENT.

receive varying quantities of the substance under investigation. Plants are then grown in these separate lots, and the effects are observed. Most substances are harmful in large quantities; it is, therefore, necessary to have the series of concentrations to discover at what stage any beneficial effect may set in.

If a beneficial effect is observed in water cultures one can be reasonably certain that the substance is directly useful to the plant, but it does not follow that it will behave in like manner in the soil. A direct test is then made in pots which, in cold weather, are kept in the plant house, and in hot weather in a cage out of doors. These experiments have the advantage that they are well under control and that they can accurately and expeditiously be carried out. The results may not agree with those of water cultures; in this case it is because secondary effects have set in between the soil and the added substance. The successful experiments are then carried into the field; first on small plots, then on large ones, till finally they can be tested on a scale large enough to satisfy any farmer.

It has, at various times, been supposed that small quantities of stimulating substances might prove very beneficial to crop production; many of these have been tested at Rothamsted, but very few have proved successful. So far as experiments go only direct nutrients cause increases in plant growth. Another great division of the work has to do with the study of the soil. The Greeks thought of the soil as in some way living; "Mother Earth" had reality to them. Modern science has illuminated the idea and shown that the earth, though not living, is in truth alive, being inhabited with a population so numerous that millions of them occur in a saltspoonful of soil, and so small that, if they were magnified up to an inch in length, a man would, on the same scale, become so tall that Mont Blanc would not reach much above his ankles. The soil chemists, bacteriologists and protozoologists have the task of learning what they can of this population—how it lives, what it does, and whether in any way it can be controlled and made to serve the purposes of mankind.

The story is only incompletely discovered, but it is extraordinarily fascinating. This population living in dark recesses of the earth, is, like ourselves, entirely dependent on the warmth of the sun and the energy of sunlight, and, like ourselves, it has no direct power of utilising this energy but can only do so by virtue of its food. Plants alone are able to fix and store the energy of sunlight; we eat plants (or animals that have eaten them) and get our store of energy that way; the soil population feeds on roots, leaves, stems, etc., that fall on the ground and become washed in or drained in by earth worms, etc. Thus the micro-organisms of the soil are wholly dependent on plants.

The dependence, however, is mutual; plants are equally dependent on micro-organisms. Out of the dead residues the organisms make food for new generations of plants. The process is complex, as might be supposed, but it is gradually elucidated, and the facts that are coming out throw light on many of the cultivators' difficulties. Ever since soil bacteriology began enthusiasts have dreamed of a time when cultivations would be unnecessary and the farmers would only need to scatter the appropriate microbes on the soil leaving them to do the work. Careful investigation, however, has dispelled the dream; the microbes cannot work unless they have raw material and favourable conditions. All this has to be attended to by the cultivator; modern science shows no easy way round the old injunction: "In the sweat of thy face shalt thou eat bread." But full knowledge of the soil and of the ways of the plant ensures that the utmost shall be made of our natural resources, and the solution of an apparently abstruse and academic problem



LAND LEFT TO RUN WILD AT ROTHAMSTED.

has repeatedly cleared up difficulties in the cultivator's art and shown how the soil may be more intelligently and efficiently handled.

HOW MUCH RECLAIMABLE WASTE IS THERE?

BEFORE war broke out the State had embarked on an enterprise of Imperial stock-taking. Through accredited officials it was engaged in the valuation of British land. It was announced in Parliament the other day that the work was to be carried on despite the war. At present it is no business of mine to discuss that decision, though it looks daft on the face of it. Suppose a grocer to be engaged in reckoning out his tins of this and bags of that, his accumulation of tea, coffee and other commodities and their value in pounds, shillings and pence, just before an earthquake? Would he not cut a tragically comic figure if, amid the rumble and shudder of the earthquake, he went on taking weights and totting figures? And what good would they be? Afterwards, his goods might be reduced to zero in value or they might be raised to a degree undreamt of. So, likewise, this war has already changed many land values and will continue to do so still more fundamentally.

Yet the work will not have been done in vain if it furnishes data for estimating the amount of waste reclaimable land in Great Britain. Nobody can form an approximate guess just now at the acreage which might be advantageously attacked. Mr. A. D. Hall has given an admirable account of the types of suitable land, but even he does not attempt an estimate of their extent. His general definition is that

Reclamation deals with land, the initial value of which lies between £1 and perhaps £7 per acre as an upper limit, and the outlay before the land can be let for ordinary farming may be as high as £7 an acre, irrespective of buildings and roads.*

Then he gives a list of "opportunities for reclamation on a reasonably large scale." His list includes (1) land round estuaries, especially on the East Coast, (2) areas of blown sand adjoining the sea, (3) heath, (4) low-lying moor or bog, and (5) upland sheep walk.†

Mr. Hall carefully discusses the possibilities inherent in each type of land, but there is no need to discuss this with him just now. What we want is an approximate idea of the total area.

Mr. Stebbing, Head of the Forestry Department in Edinburgh University, has given some attention to the subject in connection with his special study. He says:

There are millions of acres of what has been termed waste lands in these islands, variously estimated at 4,000,000 acres in England, 4,200,000 acres in Scotland, 700,000 acres in Wales, and 1,500,000 acres in Ireland. It may be said at once that a considerable proportion of this area is suitable for

tree growth; there are also about 16,500,000 acres of mountain and heath land in the two islands, part of which could be afforested.†

It would be a waste of effort to attempt from the data at command to arrive at exact figures. Statesmen and economists do not seem to have grasped the importance of this undeveloped source of national wealth. But they have put clerks and valuers to the task of making a new Domesday Book. This is like a great many other apparent novelties in recent British administration copied from the Continent. At any rate, it supplied an opportunity for acquiring knowledge that is greatly needed. The figures collected ought to answer the oft put query as to the value put on waste land. If it were known how bogs and moors are valued for the purpose of the tax-collector, it would be possible to say how many millions of acres come within the seven pound limit set up by Mr. Hall. But it is strange that our Board of Agriculture, renowned for its careful collection and presentation of agricultural statistics, has never given attention to waste land with potentialities. Forestry experts have kept an eye on them, but they, too, are vague about the facts and appear to think of nothing with regard to waste except its "ploughing up" possibilities. Previous to the war the Board was contemplating and actually making surveys. In the words of the Head of the Forestry Department:

With regard to surveys, the Board have now made a rapid inspection of some 400,000 acres of land, with the result that approximately 100,000 acres of land which could be economically afforested have been marked down. Detailed surveys and working plans covering approximately 5,000 acres of afforestable land have been prepared or are in course of preparation for Local Authorities. It is proposed in the future to keep two inspectors steadily employed on survey work.§

There is nothing like leather, says the cobbler; nothing like woodland, says the forester; but it must be said here, as in many other places, that no survey will be of value unless made by an expert who knows the possibilities of modern reclamation. In a succeeding chapter it will be seen that when the Netherland Society began in 1892 they made more woodland than arable, but twenty years after, when the business of the company, as measured in acres, had multiplied by ten, they were planting one acre with trees to 5.86 acres reclaimed for plough and pasture. Let it be understood that not one syllable of this is meant to discourage the forester. Heart and soul I am with him. But that overlapping, which is a vice of red tape generally and British administration in particular, will be avoided if the survey determines once and for all what land should be allotted to forestry, what to husbandry.

But the great point to be established is that there is scope in Great Britain for reclamation not only by the hundred or the thousand but by the million acres. This would be demonstrated if we only took the types of land described by Mr. Hall and the figures cited by Mr. Stebbing, but both are cautious understatements. Further investigation will show that no one has as yet realised the vast field for enterprise awaiting the reclamer—there is enough to supply every soldier who will be discharged with work for a year or two, with profitable land for his cultivation in the years to come.

G.

* "Agriculture After the War," page 74. † "Ibid.," page 74 et seq. ‡ "British Forestry: Its Present Position and Outlook After the War." § Mr. R. L. Robinson, in the "Quarterly Journal of Forestry," July, 1915.

THE IMPROVEMENT OF PONIES IN THE NEW FOREST

FOR the second time during the war the Burley Pony and Cattle Society held its show on August 7th. Most of the friends of the society were away and the young men have gone, but the old Foresters and the "ineligibles" held on to their show. The entries were good—very little short of three hundred—and the quality of the exhibits was really first rate. As one of the judges—a stranger to the Forest—remarked, "some of the ponies were good enough to win in London." This was quite true, and the show was a triumph for the improved ponies which have the hardihood, the action and the fine temper of the old Foresters, with the addition of the good looks which, in many cases, were sadly wanting in the older race of ponies. The old error, which has no foundation in fact, that the uglier a pony was the more likely it was to thrive on the Forest has been entirely exploded by the stern teaching of experience. It is after the rigours of winter that the well shaped ones come out in fair condition; it is, as one might expect, the ewe necked, cow hocked, straight shouldered ones which are objects of pity to the passing tourists.

The judges for this year, who combined great experience in judging with a keen interest in pony breeding and a belief in

the value of ponies as foundation stock for light horses, gave the prizes to the best ponies of the improved sort. These judges were Sir Merrik Burrell, the Rev. E. A. Milne, the Rev. D. B. Montefiore and Mr. Herbert Pratt; representing the light horse breeding societies, Messrs. Egremont, Henry Saunders and Imeson, prominent members of the local New Forest societies. The first eight mares in the class for brood mares were of beautiful type and character, and the first three were ideal pony brood mares. The winner, Charity, was almost everything a pony should be; the second, Flashlight, was nearly as good and was a Forest-bred pony from the north of the Forest. This mare shows signs of that Arab blood, of which there has been a good deal in that part of the Forest. The third pony is of an old-fashioned pony type and reminds me a good deal of the famous Oh My. She was an extraordinarily good mover. Bred on the Forest, her sire was half Arab, half Exmoor (brought from the latter country). The next five ponies were all of the right type.

The small commoners' class was headed by an old-fashioned Forest mare, Black Bess; the second was also a wiry sort, and the whole class was of a useful type. All three classes of brood mares were represented, although here and there one noted the old faulty hocks and tendency to shallowness. But they were full of promise for the future. If all the mares were of the type and quality of the winners the progress of the breed would be rapid, but there are still too many of the inferior mares. Nevertheless, these three classes show the possibilities of improvement in the future and the achievements of ten years' hard work by the Burley Society in the past.

The young stock classes were very good. The judges noted that the pick were of the improved type and had bone of excellent quality. One point that especially struck the judges was the soundness of the exhibits. "Not in one single exhibit could we detect any sign of splints, spavins or curbs," which speaks volumes for the soundness of the New Forest pony. This quality of soundness is one of the points which, with their remarkable action, makes the New Forest pony so useful for foundation stock. The winner in Class 6, for yearlings owned by small commoners, attracted particular notice from the judges for its type and action.

The classes for truck ponies—that is, for draught ponies with power and activity—brought out some useful animals. These are the small commoners' farm horses and are among the most useful ponies bred in the Forest. The entries were smaller than usual, for a good many truck ponies have been sold to the Government. We could not help being struck by the great power, compact in a comparatively small frame, and the great activity of the winners. These were all genuine working ponies and in no way made up or kept in lavender for the show.

The harness ponies were few in number, but good in quality and action, and one at least was sold for a good price after the show. The riding ponies were less satisfactory—not that the Forest does not produce some excellent riding ponies, but that the best find a ready market and soon leave the neighbourhood. The winner of the child's hunter class, Griselda, is a charming pony, very handsome and as good as she looks. Then there was the group class. This was dealt with by Messrs. Montefiore, Dale and Pratt. This class is designed to feed the group classes at Islington. The entry was a large one, twelve groups, or thirty-six ponies in all; the class was of very high merit and it took the judges two hours to pick out the winners. The point of a group class is that there should be in it three ponies of the same type. The three groups which won the premiums fulfilled this condition. The three reserves were good, but were less even as groups; every group had some one pony of notable merit. Mr. Burry (who won at Islington this year) had two premium groups and Mr. E. Elander another. Mr. Burry won the National Pony Society's silver medal and Mr. Norris Midwood's special prize for the best pony with Midget. If four or five of these groups go to Islington the New Forest will be well represented.

The show was a most useful object-lesson as to what may be done by careful selection to improve native ponies without losing in the smallest degree their native soundness, action and hardy constitutions. The Forest ponies have gained in looks and quality and increased in value, but are as hardy as ever. The methods have been three: improved stallions, keeping the best mares for the breeding herds, and constant selection for the kind of work they are fitted for. The New Forest pony is, above all things, a working pony with a turn of speed. The breeding stock runs free, but the working stock are taken off the Forest, and at Burley we see both. The Forest pony is one of the cheapest animals to breed and rear. The sire and dam run out with the foals for six months or more, and by the time the pony begins to earn his living it is, indeed, very little in the owner's debt. Besides the brood mares actually running on the Forest, most of the working mares are also bred from. There was a pony at the show—The Brewer—which was not qualified to compete, which was almost the model of a light cart-horse. This pony was bred from a Forest mare, but by a large horse, and there are some excellent hunters graded up from Forest mares to be seen with the hounds in the neighbourhood. It is not ungrateful to say that much as the Burley Society and its sister body, the New Forest Association, have done, they might do more. The Forest pony is good, but might still be improved. X.



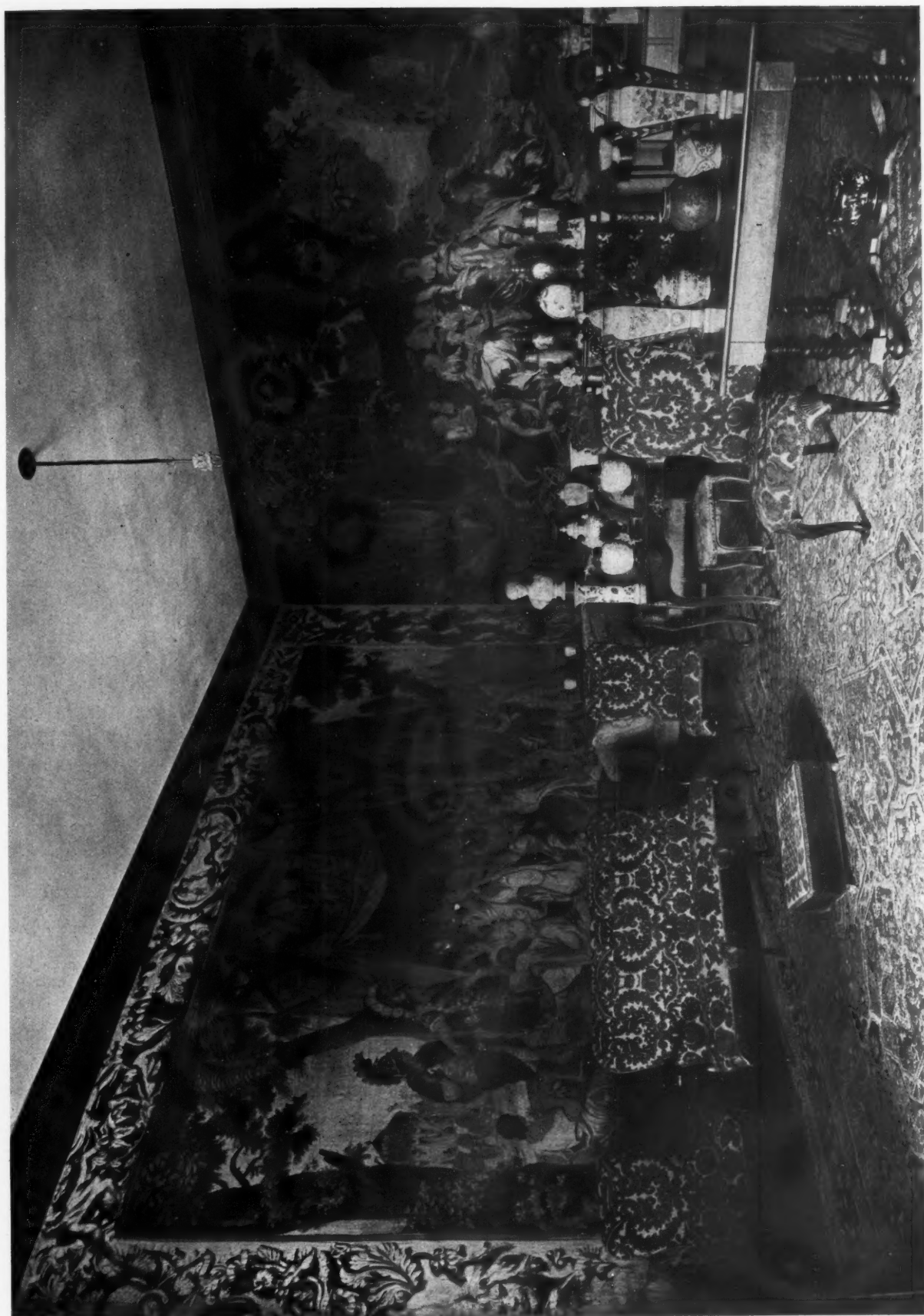
TIME has dealt harshly with the homes of the Mackenzies of Kintail and Seaforth. Their most ancient stronghold was Ellandonan, a stout keep which still stands in proud ruin amid its enceinte walls on a little rocky island at the eastern end of Loch Duich. As late as 1719 it defied southern domination and was held by William Earl of Seaforth with a garrison of Spaniards until three English men-of-war battered it to fragments. Chanonry, also in Ross-shire, was another hold which has not survived, but Colin, the first earl, "lived most of his time there in great state and very magnificently," and there he died in 1633. He was a mighty builder, and to him the Mackenzies owe Brahan, which dates from 1600. It is easy to picture the castle as it left the mason's hands, probably two floors higher than it is now, its top storey decked out with a gay oversailing parapet and angle turrets. It doubtless suffered its first damage in 1649, during the life of George the second earl, when the Mackenzies rose to mark their approval of Charles II being proclaimed King.

Mackenzie of Pluscardine was a prime mover in the insurrection, but small success attended it, and General

Leslie made short work of the Royalists' small forces. He placed garrisons in the castles of Chanonry and Brahan, and both probably suffered at the hands of their unwelcome guests. Seaforth himself took small part in these proceedings as he was with the King in Holland, and he died there of melancholy after the defeat at Worcester.

Kenneth Mor, the third earl, was born at Brahan Castle in 1635, and succeeded his exiled father in 1651, but he was a prisoner of Cromwell until the Restoration. A favourite of Charles II, he was much about the Court until he died in 1678. His son, Kenneth Og, fourth earl, was faithful to the Stewart cause at the Revolution, and Claverhouse thought well of him. When Seaforth returned to Scotland after the Battle of the Boyne he found General Mackay had placed a garrison in Brahan Castle, and was compelled to make terms. Mackay was stiff with him, insisted on unconditional surrender, and put him under lock and key in Inverness Castle. When he was ultimately released on promise of peaceable behaviour he spent most of his remaining years in France. His son William, fifth Earl, was embroiled in the 'Fifteen rising and





IN THE TAPESTRY ROOM.

Visit of Alexander (left) and Cupid with warrior (right).

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THE TRIUMPH OF MARS.

"COUNTRY LIFE."



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IN THE DINING-ROOM.

"COUNTRY LIFE."

lost many of his clan at Sheriffmuir. Lord Lovat's generalship for King George outwitted the Mackenzies, who had been holding Inverness for James, and Lovat himself took Brahan after Inverness had fallen. The clansmen had to take an obligation to behave quietly and the castle was turned into a garrison for King George. On his return from the stricken field of Sheriffmuir, Seaforth had gathered his men near Brahan for an attack, but when King George's troops threatened to give battle "he thought it convenient to capitulate, own the King's authority, disperse his men and propose the mediation of these Government friends for his pardon." Despite this surrender, Seaforth's estates were forfeited in 1716 and he sought safety in France. Returning with the ill-fated Spanish invasion in 1719 he was in one of the two frigates which alone of this latter-day Armada reached the Scottish shore. A brief stand in the pass of Strachell ended disastrously, but Seaforth once more managed to escape abroad. By way of punishment Ellandonan Castle was demolished, as already narrated. A scarcely worse fate came upon Brahan. General Wade began his "pacification" of the Highlands in 1725 and made Seaforth's home his headquarters. Seaforth himself received a pardon in the following year, but the earldom remained under attainder. When he died in 1740 his son, Kenneth, assumed the courtesy title of Lord Fortrose, and the Crown sold to the dowager Countess the attainted estates, which thus returned into the family. Meanwhile Brahan had suffered from Wade's occupation, for he carried off all its contents when he left, and it is probable he took little care of the fabric. By 1745, however, Fortrose was



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A WARRIOR KNEELING BEFORE CUPID.

"COUNTRY LIFE."

A company of Muses on the left; Diana's Nymphs on the right.

back in his home and at peace with Wade, for the disasters which had fallen on his family for a century past had cooled his ardours. His son, another Kenneth, was restored to the title of Earl of Seaforth, but in the peerage of Ireland, and in 1778 he signified his gratitude by raising a regiment, first called the 78th, but renumbered the 72nd in 1783. When Earl Kenneth died in 1781 at sea on a troopship he left no son, and the line of George, second Earl of Seaforth, became extinct. The estates passed in turn to Colonel Mackenzie-Humberston, and his brother, Francis Humberston Mackenzie, raised to the peerage in 1797 as Lord Seaforth. The latter raised a new regiment of Seaforth Highlanders in 1793, and this was numbered the 78th. In 1794 the King gave permission for the name "Ross-shire Buffs" to be used, and this remains the sub-title of the Seaforth Highlanders in the Army List. The regiment also has the doubtful advantage of a further sub-title, viz., "The Duke of Albany's," which, if Mr. Swift McNeill has his way, is likely to disappear when that German prince is relieved of his other British dignities. Lord Seaforth was a gallant figure in kilt and bonnet, as the fine portrait at Brahan testifies. Once more the title expired when he died without male heir in 1815. All this had been foretold by the Brahan seer, whose cruel death at the hands of a Lady Seaforth brought continual disaster on the family. But it is a long story and must be sought in Alexander Mackenzie's book of "The Prophecies of the Brahan Seer." The present owner of Brahan inherited through his grandmother, Lord Seaforth's eldest daughter.

It has to be confessed that the castle owes the loss of its baronial features not so much to the perils of war as to the modernising zeal of the last Lord Seaforth. He removed its characteristic external features, but happily could not destroy the charm of all the old rooms, and still less of their contents. The character of the pine panelling in the library suggests

that it must have been put up during the first half of the eighteenth century. In this room hangs the fine copy of Mytens' portrait of Mary Queen of Scots, and a very interesting picture of Rizzio. The connection with Flanders of Colonel Daniel Mackenzie, who was intimately associated with Earl Colin, is marked by the existence of the "Golden Bed," a highly ornamented piece, which Daniel brought to England in 1618 with his wife, daughter of a Flemish Count. A notable curved corner chest and cabinet in satinwood with walnut banding, now in the boudoir, is illustrated here. But the chief treasures of Brahan Castle are the fine tapestries in the tapestry room and the dining-room—a remarkable series illustrative of the "Triumphs of the Gods." I am indebted to Mr. W. G. Thomson for the following notes on their provenance. Among tapestries of the Renaissance this was a favourite subject, and many designs and cartoons were made from the sixteenth century onwards. In the seventeenth century Noël Coypel painted a series of graceful arabesques founded on designs by Andrea del Mantegna, which was reproduced several times by the weavers of the Gobelins and of Brussels. The "Triumphs of the Gods" at Brahan Castle belong to another style and period and



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MARY, QUEEN OF SCOTS.

"C.L."

were woven from cartoons most likely by some Flemish artist. They represent the Triumph of Mars, who, crowned by Victory and preceded by Fame, rides in his chariot drawn by lions, and is accompanied by warriors, captives and spoils of war.

In another panel (of which the border is missing) a warrior is kneeling to Cupid and female divinities; on the right is an opposing group of Diana's nymphs, on the left a company of the muses. Apollo with his lyre and attendant muses, forms the subject of a third hanging, while a fourth shows Diana with her nymphs resting after the chase. The fifth tapestry represents Neptune with a goddess in a chariot drawn by sea-horses. With the exception of the "Cupid" tapestry all these are framed in most beautiful borders of conventional floral forms of which one element occurs in the borders of some Beauvais tapestries of the eighteenth century.

The Brahan Castle tapestries are probably of Brussels origin. The panel containing Cupid and the warrior is signed by V. (Urban) Leyniers and bears the two B's flanking a shield which was the chosen mark of the Brussels ateliers. Of the "Triumph of Mars," a duplicate tapestry with variations in composition, detail and dimensions is in the collection of the Duke of Buccleugh and bears the signature of V. Leyniers.

The family of Leyniers was one of the most celebrated for nearly three hundred years in the annals of tapestry-weaving in Brussels. Son succeeded father until a veritable dynasty was evolved, and there are more than twenty members of the Leyniers family recorded in the registers of the trade. Some were dyers as well as tapestry weavers, and among these was Urban, whose name occurs on the tapestry at Brahan Castle. He was born in 1674, was at first a dyer, became a master in 1700, and died in 1747. Some of his tapestries were woven with a partner named Reydams, and a set of three panels illustrating the History of the Duchy of Brabant, was made for the Council Chamber of Brussels in 1718.

Leyniers is known to have woven a History of Don Quixote, a set of tapestries representing peasant life after Teniers, and a panel entitled "Fishing," which was hung in the Hall of Communal Council in Brussels. Curiously enough there is no mention of the "Triumphs of the Gods" in his weaving record, but in that of Daniel, his son, who succeeded him, we find that he sold a set of seven pieces of the subject for the decoration of the Hotel d'Orange the year after Urban's

death, so these must have been begun in Urban's lifetime.

The bordered panels at Brahan Castle are, with one exception, probably the work of Peter Vanden Hecke, another famous weaver of Brussels, where he became a master-weaver in 1710. From that time until his death in 1752, he produced many tapestries of importance, among others some representing the History of Don Quixote, Psyche, the Seasons, Peasant Feasts, and Pleasures of the World.

At the Brussels Exhibition of 1880 three tapestries belonging to the municipal authorities of Ghent were shown. They were indubitably by Peter Vanden Hecke. One of them, "The Triumph of Mars," was a replica of the tapestry at Brahan Castle. Another panel illustrated the Triumph of Neptune, and the third was entitled "Peace." All possessed the same borders. To the same city belonged panels representing Diana resting, and Apollo and the Muses.

One wonders how these have fared in German hands! The tapestry at Brahan Castle representing Alexander visiting the family of Darius evidently belongs to another series. When the King, accompanied by Hephaestion, visited Sisagambia, the wife of Darius, she knelt down before Hephaestion, mistaking him for the King. This is one of the cartoons of the History of Alexander designed by Charles le Brun and carried out by the Gobelins weavers in the seventeenth century. One of the most successful series of Gobelins tapestries was "pirated" by the Brussels weavers. There is a set of the subject in Hampton Court Palace, made by Jos de Vos of Brussels in the eighteenth century. The very notable border of this tapestry at Brahan Castle is suggestive of an earlier style, and the panel has been altered in



CORNER CABINET IN BOUDOIR.



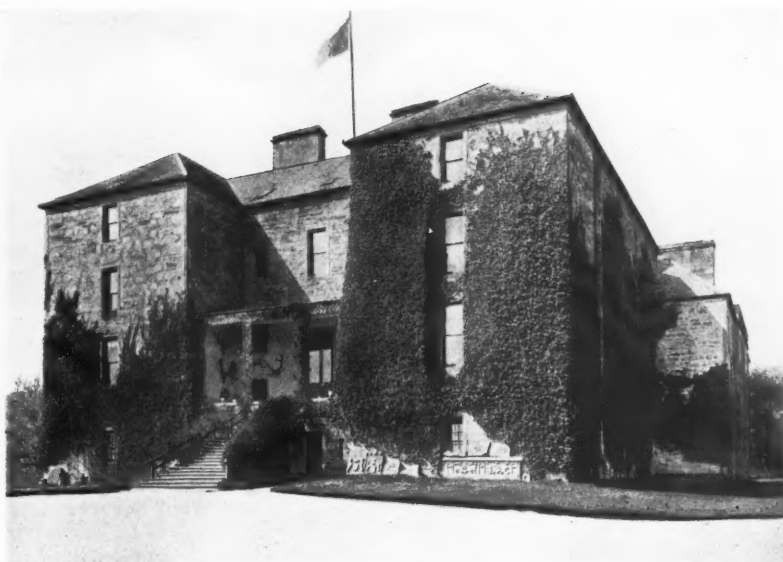
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DIANA RESTING AFTER THE CHASE.

"COUNTRY LIFE."

composition. It is not known which of the Seaforths collected this delightful series of tapestries, but as Mr. Thomson's elucidations of authorship place their making in the second quarter of the eighteenth century, it is likely they were bought by Lord Fortrose or Earl Kenneth to beautify the castle after Wade's hard usage of it. They may, however, have been acquired by William, fifth Earl, during his sojourns on the Continent in the many periods when the Scottish climate was unhealthy for King George's enemies.

There are few houses about which the romance of the Highlands and of devotion to the Stewart cause linger more convincingly than Brahan, despite the way that the fabric has suffered. The portrait of Mary Stewart is in appropriate hands, belonging as it does to a holder of the Stewart name. Though Mr. Lionel Cust regards the picture now at St. James's Palace as the original, this is a noble copy, and there is another like it in the collection of the Duke of Grafton at Euston Hall. The Earl of Crawford has a third, but it shows the bust only. The traditions of the Seaforths seem nowhere more alive than in their old home still owned by a Mackenzie, who derives directly from the last Seaforth to be ennobled. Of his four



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ENTRANCE FRONT OF BRAHAN CASTLE.

"C.L."

sons none left an heir, but though the title lapsed, the name passed on through their eldest sister, whose son was the father of the present holder of Brahan, Colonel Stewart-Mackenzie of Seaforth.

LAWRENCE WEAVER.

WHAT NORTH WALES HAS DONE FOR THE WAR.—I

WALES, set between plain and sea, full of hill fastnesses, has the traditions of an ancient fighting race, and to-day, as a landowner in the Vale of Glamorgan wrote, "Welshmen have a reputation as fighters, and although I do not want to draw any comparisons between one race and another, you can believe me when I say that the Welsh are fighting in this war to the height of their traditions. They are quite fearless under any circumstances—quite indifferent to the perils around them—and when the storm of shot and shell is at its height you will find them in the trenches as calm and cool as if only a sham fight were proceeding." The valour of the King's Welsh bodyguard on the field of Agincourt is as fresh as ever it was in the Welshmen of to-day. The establishment of a regiment of Welsh Guards was a timely recognition of this truth, "which greatly gratified a people who must needs regard the living as in some respects but guests of the kindly dead."

The Welsh Guards is not the peculiar property of the northern counties of Wales, and is recruited through the length and breadth of Wales, but many men of North Wales hold commissions in it. Lord Harlech is its honorary Colonel, and Lord Clive and Lieutenant W. H. Gough hold commissions in it. Lord Newborough, who lately died of illness contracted in the trenches, and Captain Osmond Williams, who led the attack magnificently at Hill 70, are among the fallen. The newly formed Welsh Guards did as well as the older regiments, the Scots and Irish Guards, who attacked on the 27th near Loos. The Guards' Division, under Lord Cavan, was among the principal British reserves at Loos, and first made their *début* as a division in that battle. The 3rd Guards Brigade, of which the Welsh Guards formed

part, was in reserve behind the ridge west of Loos during the advance of the 1st and 2nd Brigades. In the attack on Hill 70 the 4th Grenadiers, who led the 3rd Brigade, lost so heavily from gas shells that the Welsh Guards, who were in support, were sent forward. They were warned that directly their men emerged over a ridge about a mile to the north-west of Loos they would come under heavy fire. Every battalion went forward with perfect steadiness and discipline, and the sight was very impressive. The assault on Hill 70, east of Loos, was left in the hands of the

Welsh Guards, and part of a battalion of the Grenadiers. The moment the troops reached the upper slope of the hill they came under a withering fire from a redoubt that remained in the German's hands. The Welsh Guards went into action shouting, "Welsh Guards" and "Wales for Ever," and never faltering, reached the top of the hill and established and maintained a line just below the crest. When darkness fell the 2nd Scots Guards were sent to relieve the Welsh, who came through their first engagement with great credit.

The men of the counties of North Wales have not been behindhand in offering their services. Lord Penrhyn, speaking at a recruiting meeting in the early months of the war, said that he had two sons in the Army, one of whom was wounded and missing; his two brothers were both in the Army, and five brothers-in-law and eleven nephews were serving their country. Since then Lord Penrhyn has rejoined the Life Guards; and his eldest son, Lieutenant the Hon. Alan George Sholto Douglas-Pennant (Grenadier Guards), who was reported wounded and missing, is reported killed. His second son, Second-Lieutenant the Hon. H. N. Douglas-Pennant, is in the Scots Greys.



LORD NEWBOROUGH.
Welsh Guards. Died August, 1916.



CAPT. O. WILLIAMS, D.S.O.
Welsh Guards. Killed at Hill 70.

Captain the Hon. G. H. Douglas-Pennant of the Grenadier Guards fell at Neuve Chapelle in March, 1915, and Lieutenant the Hon. C. H. Douglas-Pennant of the Coldstreams in October, 1914.

In Merioneth, Sir Osmond Williams of Castle Deudraeth has lost his eldest surviving son, Captain Osmond Williams of the Welsh Guards. Captain Williams had served with the 19th Hussars in South Africa, and was known throughout the cavalry and, indeed, the Army, as "Bulger," a nickname given him during the Boer War. When the war came he offered himself to the War Office in August, 1914, but was impatient to be at work, and instead of waiting for a commission enlisted at once as a trooper in the Scots Greys, and won his commission on the field for gallantry. He was awarded the D.S.O. for "gallant service near Messines in ascertaining under fire the progress of night operations, and especially on the night of October 31st for leading the 12th Lancers to position for a counter-attack, in which he took part, accounting for eleven of the enemy himself." On another occasion, after taking part in a counter-attack with a squadron of the 20th Hussars and some French soldiers, he had to lie for upwards of ten hours without moving under heavy fire sheltered by a hillock, while the enemy had to cut away the ground with rifle and machine-gun fire. In April he was gazetted to the newly formed Welsh Guards, and it was during the Guards attack on Hill 70 that he was mortally wounded. The last fight was as gallant as the first, and it was when saving a wounded comrade that Captain Williams was shot; and as he lay ill, he chiefly talked of the fine behaviour of his men. Lord Harlech's son, the Hon. W. G. Ormsby-Gore, has been an aide-de-camp on the personal

but hopes to be soon passed fit for service. Major H. M. Richards of Caerynwch is second in command of the 16th Welsh Fusiliers, and four sons of the late Hon. Charles Wynn of Rûg are serving, Captain Vaughan Wynn in the 9th Lancers, Lieutenant John Wynn in the Navy. Among Merionethshire men who have fallen is Lieutenant Rhodie D. Owen-Jones, 36th Jacob's Horse, the only son of Major-General R. Owen-Jones, C.B., of Brynteged. He went to France on the outbreak of the war, and was wounded in the trenches in 1915 and invalided home. He rejoined his regiment in the spring of 1915, and was killed in January, 1916, while performing one of his special and dangerous duties, by the premature explosion of a time-fuse bomb. A brother officer wrote that he "was the life and soul of everything that went on, and you can have no idea how the men loved him."

In Montgomery, among the fallen is Captain Hugh Beauclerk Mostyn Pryce of the Rifle Brigade, the only son of Mr. Edward S. Mostyn Pryce of Gunley, the last direct representative of the Pryces of Gunley. In the early morning of March 15th, 1915, Captain Pryce gallantly led two companies of the 4th Battalion, and stormed the trenches near a village which had been occupied by the Germans during the battle of St. Eloi. He was afterwards hit in the head by a German sniper from the eminence called the "Mound of Death," which dominated the position, while directing his men in fortifying the trenches they had won. Lieutenant C. Williams Wynn of the Coldstream Guards, only son of Mr. A. Williams Wynn of Meifod, Lieutenant N. P. Turner of the South Wales Borderers, and Lieutenant R. E. Naylor of the 1st Welsh Fusiliers have also fallen. Captain J. M. Naylor of Leighton Hall is serving



COLONEL JELF-REVELEY. CAPT. W. H. WYNNE-FINCH.
7th Royal Welsh Fusiliers. Military Cross.

CAPTAIN JOHN EVANS. LT. CLOUGH WILLIAMS-ELLIS
Military Cross. Welsh Guards.

staff since the early days of the war. Sir Edmund Buckley's only son, Second-Lieutenant Edmund Maurice Buckley of the 7th Welsh Fusiliers, fell on August 10th at Suvla Bay. Major-General John Vaughan, C.B., D.S.O., son of the late Mr. John Vaughan of Nannau, went out with the Expeditionary Force as chief of the staff to General Allenby, and was promoted brigadier-general to command the 3rd Cavalry Brigade. He was subsequently given command of the 3rd Cavalry Division, and was awarded the C.B. for his conspicuous service at Ypres. Lieutenant-Colonel E. H. Thruston of Pennal Towers has also done good service during the war, and is one of the very few men of the New Army who from being a civilian before the war went to the front in less than a year as a commanding officer, for from August, 1915, he was in command of a pioneer battalion of the South Staffords in France, until in March, 1916, he was given command of a battalion of the Welsh Fusiliers. Two sons of Mrs. Jelf-Reveley of Brynwgwm are serving. The eldest, Lieutenant-Colonel A. E. Jelf-Reveley, took command of the 7th Welsh Fusiliers in May, 1914, and landed with them at Suvla Bay on August 9th, where the battalion suffered heavily, losing 16 officers and 150 men. On the evacuation of Suvla, Colonel Jelf-Reveley was the only commanding officer with his division who had commanded his battalion since mobilisation. Second-Lieutenant C. H. Jelf-Reveley, who returned to England from Canada to serve, was also through Gallipoli, attached to the 4th Worcesters. He is now serving in a machine-gun company in France. Captain Anwyl, son of Mr. Anwyl of Lligwy, who is in the 1st Welsh Fusiliers, served with the 8th Welsh Fusiliers, in Gallipoli, was invalided home last autumn, and is still in a nursing home,

in the 2nd Battalion of the London Rifle Brigade; and of his brothers, Lieutenant J. H. Naylor is in the Montgomeryshire Yeomanry, and a third holds a commission in the 3rd Hussars. Captain George Herbert Mytton of The Garth, Welshpool, is commanding the 2nd Montgomeryshire Yeomanry, and his brother, Captain A. Mytton, who has been mentioned in despatches, is serving in East Africa. Major W. J. Corbett Winder of Vaynor Park is in the 7th Welsh Fusiliers, and his youngest brother, Captain F. F. Corbett Winder of the Lancashire Fusiliers, was very severely wounded in the retreat from Mons and is a prisoner in Germany. Commander M. D. Evans, third son of the late Major D. Evans of Glascoed and Penymaes, was mentioned in despatches for his services in the Dardanelles, and three brothers are serving, Captain F. A. D. Evans of the 7th Welsh Fusiliers, who was mentioned in despatches and awarded the Military Cross for services during the Suvla Bay landing and the Gallipoli campaign; Mr. J. W. D. Evans, who joined a Canadian battalion; and Mr. H. W. D. Evans, who is in training in the Inns of Court O.T.C. Captain David Leslie, son of the late Mr. H. D. Leslie of Bryn Tanat, who is in the Shropshire Light Infantry, was wounded at Ypres in 1915; Major W. M. Dugdale is with the Montgomeryshire Yeomanry in Egypt, and Captain Gerald Dugdale in the Flying Corps.

Among the many Montgomeryshire men who have won distinction in the war are Brigadier-General A. E. Sandbach, C.B., D.S.O., Major H. M. Pryce-Jones of the Coldstream Guards, Brigadier-General Wilding, and Major J. M. R. Harrison, D.S.O., who has been twice mentioned in despatches. Lieutenant-Colonel E. Whitmore Jones,

second son of the late Mr. R. E. Jones of Bryn Talch, took part with his regiment, the 2nd South Wales Borderers, in the taking of Tsing-Tau, and was afterwards invalided home from Gallipoli. He is now in charge of a group in a machine-gun camp. His brother, Lieutenant-Colonel Lumley Jones, D.S.O., who went out with the 2nd Essex Regiment in 1914 as Captain and Adjutant, won the Legion of Honour for his work in the retreat from Mons. After taking command of the regiment he was promoted to the rank of Brigadier-General and awarded the D.S.O. He has been four times mentioned in despatches.

In Carnarvonshire, Captain Morys Lloyd Mostyn of the Welsh Fusiliers, son of Colonel the Hon. H. Mostyn of Bodysgallen, who commanded the 17th Welsh Fusiliers, was severely wounded in May, 1915. Captain John M. Evans, son of Colonel O. Evans of Broom Hall, who is commanding the 22nd Welsh Fusiliers, was severely wounded at Zonnebeke in

October, 1914, and was later appointed adjutant of the 1st Welsh Fusiliers. He was again dangerously wounded at the battle of Loos, being mentioned in despatches and awarded the Military Cross.

Lieutenant Alan Percy Gough, D.S.O., of Gelliweg has been at headquarters since the beginning of the war, and has been mentioned in despatches; and Lieutenant Wilfred H. Gough, son of Major-General Gough of Caer Rhûn Hall, is in the machine-gun company of the 3rd Guards Brigade. Mr. Rupert Williams-Ellis of Glasfryn holds a commission in the Army Service Corps, and his three brothers are serving: Lieutenant Clough Williams-Ellis in the Welsh Guards, Captain Martyn Williams-Ellis in the Cheshire R.F.A., and Captain Edric Williams-Ellis in the 2/6th Welsh Fusiliers. Captain W. H. Wynne-Finch of the Scots Guards, who went out with the 7th Division in 1914, was severely wounded at Kruseck and was awarded the Military Cross. M. J.

DUST

I am as dust at Your Feet,
Beautiful Feet;
Dust of the street
Gathered from hither and thither,
Blown by all winds out of heaven I know not whither.
Yet pass, oh! Feet—
Feet of the Scars—
And the dust of the street
Is the dust of the stars.

DOROTHY FRANCES GURNEY.

ART WORK AT A RUSSIAN ARMS FACTORY

TULA now resembles its English counterpart Woolwich in its strenuous endeavours to cope with the all-important production of munitions. Few people in England are, however, aware of its long history as an arms factory for over two hundred years, from its establishment in the year 1705 by Peter the Great. Here have been produced, not only guns and other weapons needed for the Russian army, but also the more ornamental daggers, pistols and weapons for the chase, together with the ceremonial arms of the Imperial Court. To these may be added the weapons made for presentation to foreign sovereigns, distinguished foreigners, nobles and ambassadors. Between 1730 and 1780 the estimated number of men and apprentices employed at Tula was 1,200, and to this period may be assigned most of its more highly finished productions, due in no small measure to the introduction of French and German armourers, who implanted their Western art and skilled craftsmanship into the work. Traces of purely German art are non-existent; the German was content to be a copyist of the prevailing French art in this and in other phases of his contemporary work. Many of the swords produced at Tula were made for presentation to warriors, mostly to faithful Cossacks, for their achievements in battle or for other services to the Russian Empire.

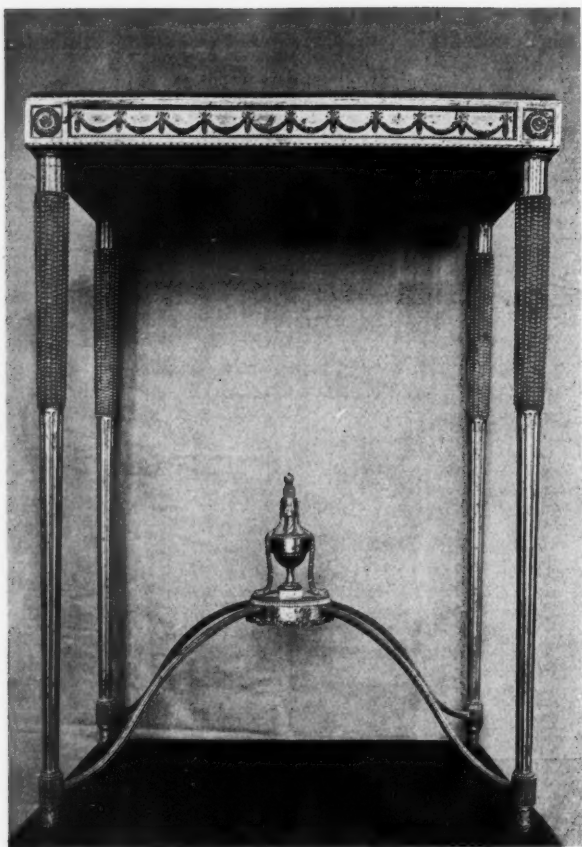


1.—ROUND TABLE IN THE HERMITAGE MUSEUM.

Sabres of Eastern type with Turkish inscriptions were also wrought there. These resemble the sabres of semi-European or semi-Turkish workmanship of the Balkans—the so-called Albanian sabres, but they are not regarded as of high quality in workmanship. The Tula factory was not confined to the production of arms, but objects for household use and decoration, such as tables, chairs, caskets, cups, candlesticks, parasols and other things, were also wrought there, as will be observed later.

The prevalence of Oriental styles in the shape and decoration of some Tula weapons is a noticeable and interesting feature, in contrast to the purely French decoration just mentioned. Among the names of foreign armourers employed there are those of Johann and Peter Lintz, Nikolai Pressia, Jacob Delkura, Peter Silmora, Martin Krieger, Mathias Klaus, Abram Bateri, Elias Erich, Johann Schaberg, Peter Kloss, Peter Grekk, Balthazar Witt, Karl Meier and Johann Holzapfel. Their names cannot at present be attached to any particular objects.

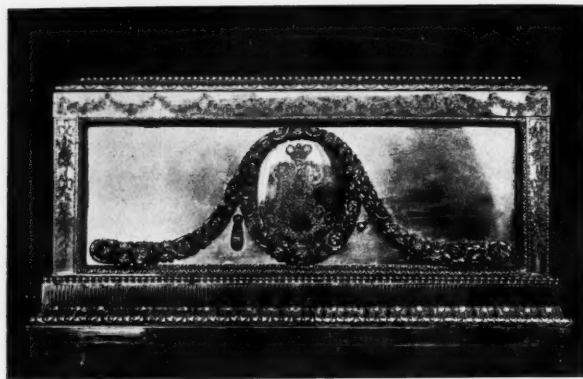
With the help of a few illustrations some of the Tula objects may be studied here, though the effect of the different coloured metals and niello can only be obtained in colours. The earlier household ornaments were made of steel inlaid with gold and silver, and frequently with the niello decoration for which Russian craftsmen to this day are deservedly



2.—STEEL TABLE DAMASCENED IN GOLD WITH THE IMPERIAL EAGLE AND CIPHER OF CATHERINE II.

famed. Two tables in the Hermitage Museum have been selected for illustration; the first is circular and the other

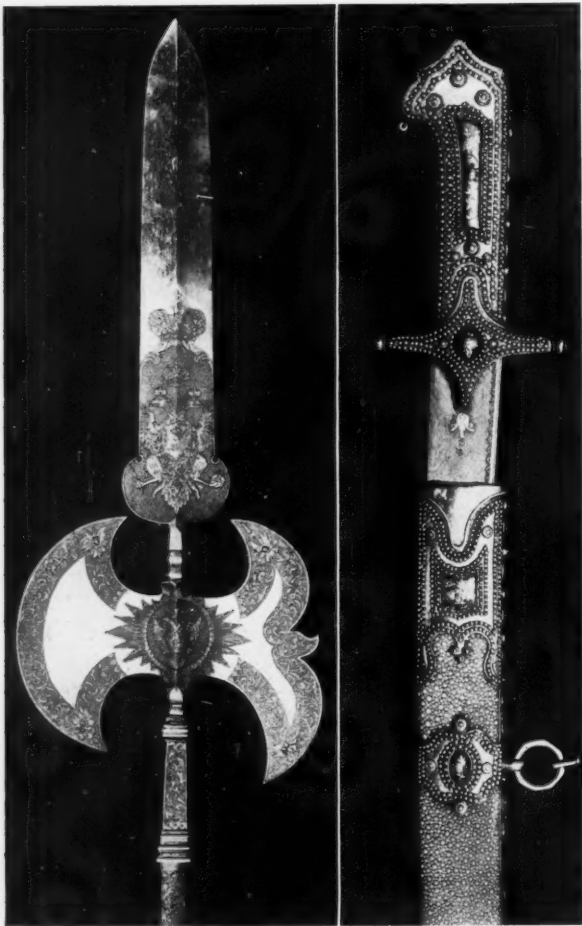
oblong. In the top of the former is an inlaid monogram and a coronet in a star, the baluster stem being embellished with narrow gilt beaded bands and silver-stemmed roses in relief and the tripod stand having gilt festoons and cut steel beaded borders on claw and fall feet. All efforts to trace the original owner and its maker have so far failed. The second table is more ornate; the steel top is damascened



6.—CASKET BELONGING TO CATHERINE II.

in gold with the Imperial eagle and cipher of Catherine II, combined with an ornate foliated design and a border of scallops and scrolls in relief, under the influence of Louis XVI style.

The third illustration is that of a halberd made in 1761 for the unhappy Peter III, who, as will be remembered, was overthrown by his wife, Catherine II, and subsequently met his death by assassination. A collector of and authority on the work of Tula, M. I. P. Batchmanoff, has permitted the illustration of a sword with a handle damascened with gold in his collection (Fig. 4), and some ornaments which will be

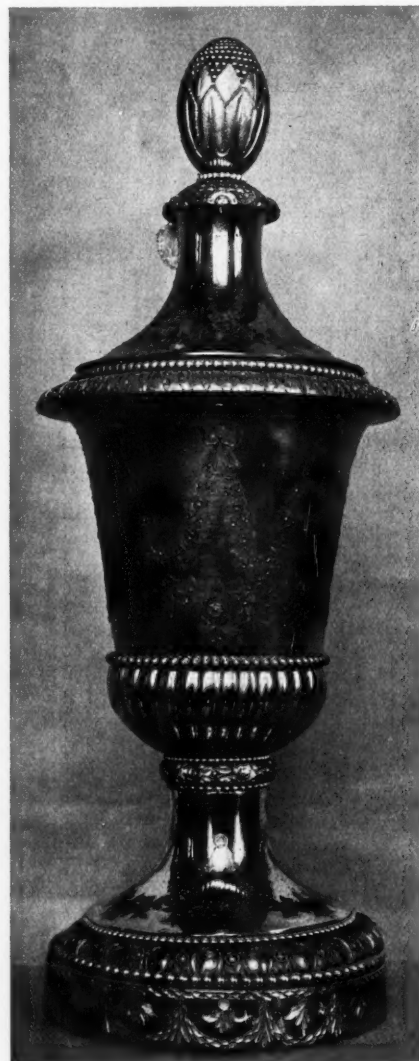


3.—HALBERD MADE FOR PETER III IN 1761.

4.—SWORD HANDLE DAMASCENED WITH GOLD.



5.—PARASOL HANDLE.



7.—PINEAPPLE-TOP VASE IN HERMITAGE MUSEUM.

described later. The fifth illustration is of a parasol of Catherine II for whom most of the ornaments at Tula were produced. The barrels of guns of this same period were usually decorated on their surfaces with ornaments etched on a burnished ground and covered with silver and gold, without niello. On the other hand, the decoration of caskets, vases and other ornaments was somewhat differently treated, the amalgamation of gold and silver being applied on chased and cast plates and pieces in the shape of bouquets, wreaths, festoons, medallions and other ornament, such as may be seen in some of the objects illustrated here; for example, on the casket of Catherine II (Fig. 6) and the vase (Fig. 7), both in the Hermitage Museum. The same decorative treatment is observable in the parasol and the round table previously mentioned.

In the eighth illustration are four objects in M. Batchmanoff's collection—a pedestal, an inkstand and two steel perfumers of pierced work, with bronze ornaments.

In the same collection are the steel and bronze candlestick, and the inkstand damascened with gold and silver. (Fig. 9.)

To these random notes on the historical arms factory at Tula should be added a brief description of two important examples of its work made in 1755, namely, a double-barrelled gun of Catherine II, and a fowlingpiece of Maria Josephine, consort of August III, King of Poland. The second piece is decorated with a Louis XIV style of plate on the butt-end, which bears a representation of a lady, presumably Maria Josephine herself, holding a gun and accompanied by sporting dogs.

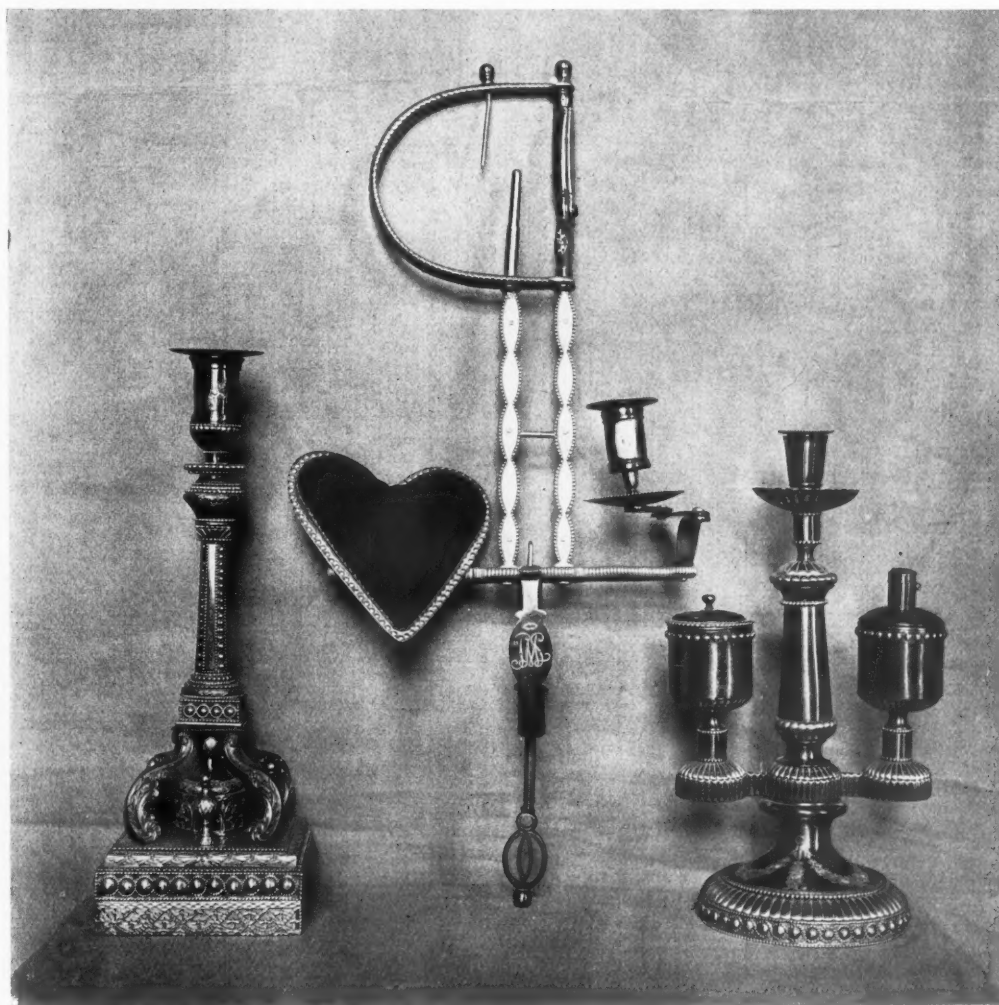
Scattered about the palaces of the Grand Dukes of Russia—for example, in the palace of the late Grand Duke

Constantine—and in those of the nobles are many other objects of Tula work, many being of historical interest in the development of the armourer's art in this Russian factory.

E. ALFRED JONES.



8.—PEDESTAL, INKSTAND AND PIERCED STEEL PERFUMERS WITH BRONZE ORNAMENTS.



9.—FROM M. BATCHMANOFF'S COLLECTION.

LITERATURE

A BOOK OF THE WEEK.

STARING right at us opposite the title page of Mr. Stanley Washburn's *Victory in Defeat* (Constable) is the very striking face of a remarkable man, General Alexieff, Chief of Staff of the Russian Army. If ever concentration, resoluteness and will were stamped on a human face, they are on this one. The type is that of Field-Marshal Joffre, if it be taken into account that one is Latin, the other Mongolian. Alexieff is to the Russian army what Robertson is to ours—the brain and centre. During the stage of the war dealt with in this book Alexieff was Chief of Staff to General Ivanov. He now holds the same position with only the Czar as his superior. Mr. Washburn's title is perhaps not quite so happy as it might be. Let us try to put the truth very simply and very clearly, for as time goes on the history of the Russian army in 1915 will increase in importance. Apparently it was Russia's evil hour. After beginning the war with a brilliant and victorious advance over the Carpathians and into the heart of East Prussia, there came a period of disaster. Austria had proved as nothing in the hands of the Muscovite, and Germany was almost forced to intervene at a very critical stage. Unfortunately, when this occurred Russia was beginning to feel very acutely the insufficiency of munitions with which she had started. Each of the Allies made the same mistake. It was due to a very great misapprehension. The excellent old-fashioned soldier who was Minister for War in France at the time expressed more than his own views when he said it was a great pity to give soldiers too much ammunition; they merely shot it away. Lord Kitchener in Great Britain judged of the requirements from his experience in Egypt and South Africa, and did not recognise till comparatively late how insufficient was his standard. In Russia the supply was measured by what was needed in the war with Japan, whereas that should have been multiplied by ten. Austria was the only belligerent, except perhaps Italy, who had recognised the part big guns were to play, and Germany alone believed in vast quantities of ammunition, though recent events have shown that even the Kaiser's advisers did not realise how much greater the demands would be upon shells. But in Hindenburg's famous campaign Germany was far superior to Russia in this respect. Yet the honours go to the latter country. In a situation of almost unparalleled difficulty the armies were kept intact and, as recent events have shown, in a condition from which they could easily be developed into the most formidable of their day.

In the first of the great German artillery drives on the Dunajec line, it was estimated that the Germans had concentrated 2,000 guns on a front of forty miles in the sector between Tarnov and Gorlica. These guns were said to be grouped in tiers, one battery behind the other, the heaviest being in the rear. Probably there were 200 big guns of 8in. or better, and the largest were the Austrian 12in. Skoda howitzers. It was estimated that in the battle which followed the enemy batteries fired 700,000 shells in two hours. Mr. Washburn says pathetically, "The Russians were not routed, as the Germans asserted. They simply remained and died." Says Mr. Washburn:

I have no figures obtainable to indicate what portion of the losses were killed, what portion wounded, or what part strayed and were taken prisoners. I do know this, however, that when the fragments of the three centre corps which had numbered 120,000 at the beginning were finally pulled together on the San, 100 miles or so in the rear, two weeks later, the total strength that rallied around the colors did not exceed 12,000.

The result of the battle was to leave a gap of forty miles in the Russian line, through which the Germans and Austrians poured like a torrent. They calculated on capturing or destroying the whole of the Eighth Army, which they might have done but for the skill and brilliancy with which Brussilov pulled his men out of the Passes. Later on comes a reference to him in regard to the retreat—"the dashing cavalry officer, Brussilov, who never until this time had been obliged to retire." Again and again during these wild times we find the Russians outwitting their opponents, fighting rearguard actions, escaping annihilation, never for one moment losing faith in ultimate victory. It was undoubtedly the lessons of this campaign which taught the Russians in what way they could most successfully tackle the same problem in 1916. It is not precisely Victory, but the hard training which was preparatory to it.

Uncensored Letters from the Dardanelles. (Heinemann, 3s. 6d.)

THIS book seems, as they say, to grow upon us. We began by not liking it greatly and ended by liking it very much indeed. The letters are those of a French Medical Officer of the *Corps Expéditionnaire d'Orient* to his English wife, who is his translator. He was at Koum Kalet, at Sedd-el-Bahr and at Salonica, so that he had plenty to write about, and he is not only an assiduous letter writer—a model to all absent husbands—but a really good one. He does not stick to bare news, but understands how invaluable is detail, and more especially colour; how a man in a blue coat is a hundred times more alive and more romantic than a mere man in a coat. So we have quite charming little pieces of description, of scenes by the wayside, such as that of the gipsy girls dancing round a village fountain on Christmas Day, their long hair, their red frocks with splashes of gold upon them, and the musicians with pipes and drums. But all the description is not of peaceful rusticity, and if anyone wants the naked horrors of war here they are in plenty. Here is a little scene after the landing at Koum Kalet: "A sergeant-major comes back to us only to die. His chest was crushed by shrapnel; and for a moment we saw his heart, almost bare, still beating. . . . A black, waiting his turn on a chair, is asked: 'Beaucoup malade?' 'Non, il y en a un peu.' The doctor looks; both legs have been torn off by a shell." We could sometimes have wished—we think his wife must have wished it, too—that he was not quite so frank and so vivid; but he is a charming person, with the childlike gallantry of a brave man who does not self-consciously want to hide his bravery, and we grow extremely fond of him. The translator has done her work with perhaps a little too faithful a literalness. Many of the phrases are those that no Englishman would use. But there is a kind of fascination about this Frenchified English, and we make no complaint on this score. She has, however, carried her faithfulness rather too far in one respect—she would have done better to cut out some of the heads and tails of the letters. Affectionate greetings from husband to wife, which are as natural and pretty as may be, are yet not suitable for the general reader to see; he feels hot and uncomfortable and as if he were intruding. The writer gave the book to a non-commissioned officer who had seen much hard service in the Dardanelles, and his criticism was that "the matter was authentic, but the style sloppy." It is not a wholly just criticism, but a useful warning nevertheless against too much unreserve.

National History of France: The Eighteenth Century, by Casimir Stryiński. (Heinemann, 7s. 6d.)

THIS is the fourth volume (but the first published) of a composite history of France, under the editorship of Funck Brentano. If the age demands these composite histories, they must no doubt be supplied; and, where each author has a volume to himself, their defects are less obvious than when Chapter I is written by Specialist A., and Chapter II by Specialist B. This volume begins at 1715 with the death of Louis XIV and ends with the meeting of the States-General in 1789; it is the era of the Regency and Law's finance, of Cardinal Fleury and Mme. de Pompadour, of Voltaire and Rousseau, of Watteau and Fragonard. The whole series of events is lucidly told by M. Stryiński, and his narrative is very well translated by Mr. H. N. Dickinson. The reader will learn here many curious facts, of which we mention one. There were ninety-nine candidates for Louis XV's hand; when the number of princesses was reduced to five, two daughters of the Prince of Wales were on the select list; but the handkerchief was ultimately thrown to Marie Leszczyńska, who ought surely to have been disqualified for the spelling of her name. If she had been rejected, she would have been happier.

Backwater, by Dorothy Richardson. (Duckworth, 6s.)

WHAT would our great-grandmothers have thought of this? is a question that rises frequently to the mind of the critic interested in the art of the present day. What, for instance, would an admirer of, say, Frith, have made of a picture by Mr. Duncan Grant; a lover of the Early Victorian drawing-room ditty of a string quartet by Mr. Vaughan-Williams, or a contemporary of Anthony Trollope of a late novel by Mr. Henry James? We may judge of their feelings to a certain extent by our own on looking back. The art of those days seems to us to have been a formal affair, much like the bedding-out system in gardening, charming in many ways, but over-restrained and lifeless. The art of the present day may be extravagant and wild, for when the reaction took place restraint was abandoned, but it is alive, and still growing and throwing out new shoots and branches in all directions. Three novels that have appeared recently, all written by women, represent one of these new shoots in literature; "The Perpetual Choice," by Constance Cotterell; "The Voyage Out," by Virginia Woolf, and "Pointed Roofs," by Dorothy Richardson. The object of these three writers is not to weave a plot, chronicle events, or even show the development of character, but to express the impression made by the life around them on the feelings that lie deeper than the senses, and in all three books the chief interest lies in the pictures cast on the mirror of the imagination which lies deep down in those depths where we feel rather than understand. "Pointed Roofs," though slight and immature, was a work of the imagination and we have awaited eagerly the further instalment which has just appeared. We are not disappointed. Like its predecessor, *Backwater* is a work of the imagination and glows with life. Like its predecessor, too, the setting is a girls' school. It shows us the petulant and inarticulate Miriam embarking on another experiment in school teaching. Again we have inimitable portraits of schoolgirls of every description, as humorous as they are merciless. But the two settings are in strong contrast. In "Pointed Roofs" Miriam is in a world glowing with colour and romance; in *Backwater* she is hemmed in by the grey walls, opaque and colourless, of a North London suburb. A new path is, however, opened out. For she is approaching the emotional stage, and we find her stretching shy tendrils

in the direction of love and romance. A glance from some stray young man gives her a glimpse of a "world where there is no need to be alone in order to be happy." We cannot but pity her in her efforts to draw gleams of sympathy from the singularly unattractive young men she meets at a Brighton boarding-house. Let us hope that life will offer a brighter outlook in the next instalment which we are happy to find promised at the end of the volume. Indeed, we hope further instalments will not be limited to one. For, so far at any rate, we feel we cannot have too much of Miriam.

Butterfly Wings, by Margaret Peterson. (Hurst and Blackett, 6s.)

MISS PETERSON has woven into her new novel, *Butterfly Wings*, an episode of the war so vivid and dramatic that we forgive her for drawing our attention toward rather than away from that obsession—for withholding the relief which in times of stress we look for in our fiction. Many, indeed, will think the pages in which the writer describes her hero's hand-to-hand fight in a German trench, his wounding, and subsequent rescue by a comrade, as the best in the book. The glimpse of the war is, however, but a side issue. The main story concerns itself with love, marriage and disillusion, ending in a *dénouement* which is worked out with considerable skill. Miss Peterson's clever choice of names sets one pondering as to whether any part is played by names in the determination of character. Peggy, Stella, Billy, Ralph, Vernon—all names suggestive of certain types—are

admirably suited to the characters portrayed in the book. We have all known petulant Peggys, serene Stellas, lovable Billeys; but whether these characteristics are due to the name, or the name due to some occult inkling of the characteristics vouchsafed to the bestower, it is impossible to say.

Gorse Blossoms from Dartmoor, by Beatrice Chase. (Longmans, 1s.)

THIS booklet of verses, by the authoress whose identity with the heroine of a recent novel must be a very open secret, since an advertisement of that novel is the only one bound in the present volume, displays all the love of colour and beauty in nature and religious practice which we should expect of the writer. We like the "sweet heart-shaped leaves" of the red rose tree in their context and the house, in "Winter," which had "drawn the thatch right down about her very eyes." Now and then, however, there is a preciousness which may induce scoffing in some only too happy to be able to pray, and we must confess to an inability to see why the fact that he was "safe shut in" prevented the "cheery din" of the cock in "The Music of Dawn" from doing the sleepers "harm." Though we grow a little tired of the robes of Night and other personifications, and of some of those archaic words which the versifiers love, Miss Chase is very happy in her Dartmoor pictures if less happy in her moralising from them; but it is, of course, merely human in us to prefer the seductive jam to the beneficent powder underneath.

CORRESPONDENCE

"RECLAIMING A NORFOLK HEATH."

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—No one acknowledges more gratefully than I do the invaluable work done by *COUNTRY LIFE*, not only in aid of the ancient buildings of this country, but also for the preservation of its natural beauty. It was for this reason that I was particularly distressed to read the article in your journal advocating the reclamation of Norfolk heaths. Although you refuse to agree to my contention, one cannot but see that you have some latent sympathy with my point of view, and I fear you have cut the ground somewhat from under your own feet by publishing that article, "Nowt but Fuzz!" It will surely appeal to all nature lovers and will win me some supporters. I have not the time, and I do not suppose you have the space, to carry on a controversy, but I do not think you are quite fair in suggesting that I would put the beauty of East Anglia before the necessity of England. I must confess that I am not one of those who are afraid that we shall become so short of food during this war as to require the ploughing and sowing of such heaths and commons as have escaped cultivation or enclosure. Should we ever come to that, I would at once bow to necessity. You also rather imply that I am not in sympathy with the advance of agricultural science, and hence that my arguments are not of great value. As a life member of the Royal Agricultural Society, and as having farmed on the light lands of Norfolk, the improvement of land, already reclaimed, interests me greatly. I know Arthur Young's writings well. In one volume he warmly praises the efforts made by Lord Albemarle at Elveden to cultivate his "wastes." That was about 1785. What was the result? One hundred years later most of that land had gone back to waste and weeds—*real* weeds; not the beautiful wild flowers you designate as such!—and all the capital and years of labour put into it were thrown away. I still maintain that the never before cultivated heath is "virgin" soil, and I know from experience that by ploughing up the close turf that covers it good crops can be obtained for a year or two without much trouble. This fact is borne out by the letter of my friend Mr. Underdown of Buckenham, which you publish in the same issue. Dr. Edwards has, of course, taken up the matter scientifically, and the results of his twelve years' work are, no doubt, quite satisfactory so far. Presumably, also, he makes it pay. But, whether he will continue to do so—and, personally, I still venture to doubt whether such land, with no "heart," can produce paying crops for a long period—can only be proved by time. Even if so, I should always deplore the loss of some of the most distinctive scenery of East Anglia.—FREDERICK DULEEP SINGH.

HEDGEROW TREES WRONG IN ALL WAYS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Mr. William H. Bond has notions of landscape beauty of the most elementary kind, judging from his letter. If I had him for a few hours on high ground in the county of Sussex he might see a splendid gallery of natural landscapes which were in no way indebted to hedgerow trees. The elm—an almost useless tree—he attempts to bolster up, and he says the suckers of the elm when "plashed" on a bank make an excellent fence against cattle! Against cattle the suckers of an elm tree are no defence at all. My old oaks in pasture are not destroyed by the rubbing and stamping of cattle. Mr. Bond thinks Sussex to be a county of open downs, but it is also the best forest county in England. He says that trees in a wood are no use for shade or shelter for cattle; but they are the only possible shelter. Hedgerow trees in no way give shelter; the only thing that can be well done against wind is by planting against the prevailing storms, and the best way to soften their force is close planting of the evergreen wood. Cutting down hedgerow trees may be often done with distinct gain to the landscape, and not in the view of the planter only, but of the artist. I have cut out every hedgerow tree with a distinct gain to views, fences and effect of woodland near. One of the lesser evils of hedgerow trees is that they prevent the making of a good quick fence—the best of all fences. As to the elm, it is a danger and nuisance. One can hardly go out of London in any direction now without seeing many bodies of dead elms alongside the roads.—W. ROBINSON, Gravetye, Sussex.

"WITHIN SOUND OF THE GUNS."

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Referring to the letter of Mr. M. G. S. Best in the Aug. 12th issue of *COUNTRY LIFE*, I may mention that I have recently been staying at Coldharbour in Surrey, and from a ridge above that hamlet have repeatedly heard the sound of distant gun-firing. Leith Hill is situated a short distance from Coldharbour and is the highest point in the South-west of England and clearly a very favourable spot for acoustic observations. On several days within the last three weeks I have been present on its glorious summit, and on most occasions, even until late in the evening, I have distinctly heard the deep boom of the guns. No doubt some of the sounds emanate from guns in England, but by reason of the special character of many of them—their constancy and of the lateness of the hour at which they have been heard—they have produced a strong belief, almost amounting to a conviction in my mind, that a large number of the sounds originate from guns fired in France. The lady caterer, who is in attendance all day on the hill, informed me that the sounds have been very evident from the commencement of our offensive in France, and her knowledge of the sounds, gained from many years' experience on Leith Hill, leads her also to the opinion that many to be heard at the present time emanate in France. To sit in the intense stillness of the evening on Leith Hill and to hear now and then the deep booming of the guns far off in France is very awe-inspiring; the contrast which it represents between peace and war is profound.—PERCY EDGERTON.

WAR WORK BY A WOODPIGEON.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—My little sisters and brother, aged respectively ten, seven and five, have at last been obliged to divulge the great secret which has kept the family in a state of expectation for the last five weeks. At breakfast to-day it all came out. This is a faithful account of the happenings, all unknown to us until this morning. It seems the three, who are always off on mysterious expeditions, met a "large boy" in the lane; the boy was bearing with him fourteen hen's eggs, doubtless eggs about to be hatched by some fowl from our own poultry yard. He, probably fearing a discovery, thought it best to make them participate in his ill-gotten gains, and very kindly offered them half a dozen. The three were delighted and we were informed that there was a "great secret" on, which we should be allowed to know as a favour in a few weeks' time. Meanwhile our interest was sustained by remarks such as these: "Come on, 'Boy,' it's time!" "You go and do it this morning," and "I do hope Mother isn't going to take us for a walk after tea; we've got some work to do!" Then there were vigorous beckonings and still more remarkable frowns. It appears that a broody hen was put in charge of one egg (for they had understood from the "large boy" that all would hatch soon), and the remaining five eggs were placed in an old bag and carried carefully to what is known as the "brook," where the eldest of the trio climbed a tall oak tree. At the top of this was a woodpigeon's nest with her two eggs, and in it Phyllis deposited the five hen's eggs. The feelings of the pigeon on her return may be best left to the imagination! Various and many were the visits paid to this nest by the three, until one happy day about a week afterwards they found the first of the five eggs was hatched, and there lay a little chicken, 30ft. to 40ft. up, in the nest of a woodpigeon! The remainder came out at intervals of a few days, though, sad to say, the fifth egg was addled; and we are now told that the broody hen was "awfully cross indeed" because she had not been successful with the sixth egg.

Evidently we are to believe that woodpigeons are much better for this purpose than the ordinary barndoor fowl! For a few days the chickens were left in their lofty abode, until they became too restive; they were then brought carefully down and put in an old ferret box in the copse. The three chose this spot because they thought that otherwise the chirpings would come to our ears. To keep them from catching cold at night, birds were daily caught in the fruit pen, blackbirds, thrushes, greenfinches, robins, and even a bullfinch, and also put in the box, so that they

"should cuddle up to the chickens and keep them warm." The woodpigeon, having done her duty by one family, has now hatched out her own little ones, and the fifth addled egg, "which really did smell horrid," was thrown away. The chickens are now doing well on the lawn; they are fed on wheat, oats and scraps, are taken down to the brook nearly every afternoon, and are given freshwater shrimps "for tea"! We are informed by the three that "there are three mothers and one daddy, and we hope to have some eggs soon"! I have never heard of such an occurrence before, and I wonder if any of your readers have.—DOROTHY KELWAY, Langport, Som.

ANOTHER OLD RIDDLE.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I enclose another ancient riddle lately discovered among some old papers. Perhaps your readers may be able to give the answer.—RAVEN.

Cut off my head and singular I act,
Cut off my tail and plural I appear—
Cut off both head and tail and wondrous fact,
Altho' my middle's left, there's nothing there.

What is my head cut off? A sounding sea.
What is my tail cut off? A flowing river.
Beneath the ocean's depths, I fearless play,
Parent of softest sounds, tho' mute for ever.

"SPEED THE PLOUGH."

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I have read with interest your article on the above matter; I can confirm every word you say. On my farm here, on weald clay, I have the records of 102 acres of grass land that is used for making hay. When I first took possession of this from a tenant of mine, in 1912, it grew practically nothing but rushes, spurrey and other weeds, and my tenant told me that cattle could not live on it. Since the autumn of 1912 it has received the following treatment: One ton to the acre of ground limestone, and 9cwt. of basic slag per acre, applied 5cwt. in 1913 and 4cwt. in 1915. During August, September and October each year I have run a number of sows and large pigs over it; during the winter months I run young pigs up to six months old, as my heavy clay land will only carry small pigs on the pasture in winter. The results are as follow, and speak for themselves as to increased productiveness of the land: 1912.—Practically all mown off and used for litter; had to buy hay to feed my cattle. 1913.—Thirty-three tons of hay. 1914.—Seventy-nine tons of hay. 1915.—One hundred and fifty tons of good hay. 1916. Two hundred and twenty-eight tons of very good hay. In addition to this increase in crop, the aftermath is now splendid; almost a sheet of white clover, all of which has come naturally with the improved

be a punishable offence, also warbles if found on the cattle of any farmer; 5s. fine for every warble found, with 1s. to go to the finder, would stamp out the warble fly and its ravages in two years. My arable land will show great improvements also; but this takes more time, and as some of the arable had not had farmyard manure for over thirty years, there is some leeway to make up.—S. F. EDGE, Gallops Homestead, Ditchling, Sussex.

ECONOMY IN THE GARDEN.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I have read with interest your leader in issue dated July 22nd devoted to the booklet recently published by the Royal Horticultural Society, entitled "Economy in the Garden." From a perusal of this pamphlet one might get the impression that there is only one gardening paper which has opened its pages to the important question of garden economy in war time. The extremely useful article by Mrs. Beckett on "Fruit Bottling without Sugar," which was given prominence in the *Garden*, July 1st, and "Anne Amateur's" directions on "How to Preserve Fruit without Sugar or any Special Apparatus," reprinted in that journal's issue of July 22nd, as well as articles of earlier dates, might be referred to with advantage by all who are interested in this subject. Can any of your readers tell me of a satisfactory way of preserving peas and beans and the best varieties for the purpose? To-day I received a letter on this subject from a practical housewife, in which she says: "The Royal Horticultural Society's pamphlet on fruit bottling is not much good as it only tells how to bottle peas and beans with expensive apparatus, and the Dutch 'salted' way is very unsatisfactory. I have tried it more than once. There is a good Italian way, for their bottled vegetables are the best I have ever come across, but I have never been able to get information as to their method. I suppose it is a trade secret and, perhaps, not suited to home use." Peas and beans may be bottled in the same way as fruit, but can they be preserved by a drying or salting process? Information on this subject would be of great value as there appear to be large crops in many places.—H. C.

"JESUS OF NAZARETH PASSETH BY."

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Higher, still higher we climbed a rocky road in a quaint little Victoria carriage drawn by a sure-footed mountain pony with a happy Italian driver, who, at intervals, enlivened us in his soft musical voice with snatches of Neapolitan love-songs. We had left the lovely seaport of Salerno, with its wealth of roses and orange groves, behind us, and were now on our way to the less frequented, though more picturesque, mountain town of Ravello. As we ascended, orange groves gave place to lemon groves and vine-clad slopes, and, on the roadside, a perfect riot of asphodels and wild campion forced us to leave the Victoria in order to be nearer to the sweet-smelling blossoms, and to gaze backwards at the blue bay of Salerno dancing in the

sunshine at our feet. As our hardy little pony was tired after its long journey from Pompei, the driver produced some fresh lettuces from under the seat of the carriage and fed Bruno, and he, much to our amusement, took a bite of the salad time about with the pony. Soon we reached Ravello and we chose for our abode a charming old palace, now used as a pension, in whose garden wistaria and Banksia roses scrambled about at will on the old walls and pergolas. In the short twilight of that lovely summer night, as we sat on a high balcony commanding a wonderful view of the extensive coastline and wooded mountains, a most interesting incident occurred: Suddenly all the houses in the small mountain villages and hamlets dotted over the hills were lighted up. This was a beautiful sight, although it lasted only for ten minutes; then, as suddenly, all was darkness! What could it mean? We gazed in wonder and expectation, and the intense silence and stillness all round infected us with a strange feeling of holy awe. I asked a native of the place "if the lights would appear again," and she said: "Oh, no! Christ has passed by, but next Thursday he will come again." Then we understood that it was a very ancient custom for the inhabitants of the villages and for those dwelling in the scattered hamlets to light up their windows each Thursday night at ten o'clock in order that Christ might see His way when He passed along. This curious and really beautiful custom is said to date from the time He lived upon earth, and to this day the lights shine in town and hamlet for His passing every Thursday night!—MARIE PALMER.



THE MOUNTAIN TOWN OF RAVELLO.

tertility of the soil. Surely the time has arrived when Government action must prevent landowners leaving their ground in the condition mine was when I first took possession. In travelling about the country one can see thousands of acres of so-called pasture given up to weed growing. Surely a law to fine people for growing certain weeds would be a wise one. Round me there is so-called common land growing sheets of flowering thistles, and it is terrible to think of the wasted labour that must in the future result from farmers trying to destroy them on their land. Weed growing should

SNAKES' EGGS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I am enclosing you some photographs of a snake's eggs which I thought might interest some of your readers. The other evening, when the gardener was throwing some ashes on the rubbish heap, he saw a snake wriggle out, and on looking he found a hole, and after digging a little way he came across a glass jam jar, about 6in. long, which was crammed with the snake's eggs, there being quite fifty of them. On looking further another hole was seen and on again digging two more nests were found, there being quite 100 eggs altogether, which would have hatched in a very few days.



A JARFUL FOUND IN A RUBBISH HEAP.



MORE EGGS AND A SNAKELET FROM THE SAME HEAP.

is not often that a snake of any sort is seen in these parts. Would any of your readers let me know how long it takes for snakes' eggs to incubate.—ELEANOR SHIFFNER.

ANCIENT IRON SMELTINGS IN BRITAIN.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Can any of your many readers, I wonder, give me any information regarding the ancient or mediæval (A.D. 500 to 1600) or even modern smelting of iron on the charcoal hearth method in this country? I know that it was introduced in Roman times, i.e., before A.D. 300; and our woodlands had been destroyed by it till the end of the seventeenth century. In districts like Manton Common, in north-west Lincolnshire, the whole of the trees seem to have been destroyed by iron smelting operations. On that common there are no less than three beds of ironstone—(1) the Marlstone Bed; (2) the Pecten Bed; and (3) the better known Frodingham Bed. All these beds have been used at one time or another. I find in my notes, I regret to say without any reference to an authority, that the local iron smelting works of England failed at the end of the seventeenth century for want of wood from which to make the required charcoal. Now the scoriae and old iron pits, side by side, on Manton Common and Warren are plain enough, and that the woodlands of this district are only comparatively modern is equally plain to the eyes which can read off the facts. On such a spot as Manton the birch, oak and pine might have flourished formerly, and perhaps the beech, after the Roman period, on the limestone just above. Practically all these trees were swept away to make charcoal for the iron smelting trade before the end of the seventeenth century. When the wood failure came in this country English ironstone ore was sent to Ireland to be smelted on the same method—the only one in use at that time. The result was that the Emerald Isle was soon depleted of its ancient woodlands too. Dr. Smith's "History of Kerry," 1756, says even the arbutus of the south-west was used for charcoal making, and its area of range much restricted. Can anyone give me references to this old iron smelting trade on open hearths in England or Scotland, or kindly name its literature, especially to works of the sixteenth and seventeenth centuries? A question of such great national importance must at least have had a fragmentary literature, one would think. My personal interest in it is solely in regard to the destruction of our ancient woodlands and their renewal.—E. ADRIAN WOODRUFFE-PEACOCK.

THE LURE OF THE CHILTERNs.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—There is no pleasanter recreation on a summer day in this absorbing present war-time than to escape for a ramble in the Chilterns, for, apart from the delightful scenery, they are unique in their historical associations. The days of Lord Beaconsfield belong to a departed historical age, and more than any other historical character—more than Hampden, Penn and Burke—he is united in memory with the Chilterns, for no one has revealed for them as he has so intimate a personal affection, no other in an eventful life was so closely and continuously united with them. When, however, one recollects

the solitary hours which Beaconsfield passed among these wooded hills from youth to old age one can to some extent realise their hold upon him. For the full appreciation therefore of this union one should walk on the hillsides above the early home at Bradenham and through the surrounding remote beech woods about Knaphill Common. The union of scenery and personality which is the lure of the Chilterns becomes certainly most marked in this Wycombe district, but in the woodland lanes about Hampden, in the church of Great Hampden itself, on the heights of Penn and in the High Street of Beaconsfield one is brought constantly into touch with the historic past. Nor is this continuity broken to-day. From many parts of the Icknield Way, which creeps along the northern escarpment of the Chilterns, the eye catches a windswept and solitary column on Barcombe Down which opposes the setting sun as it sinks beyond the misty expanse of the Vale of Aylesbury. It recalls us from antiquarian thoughts to the realities of recent events, since it is a memorial to the men of Buckinghamshire who fell in the South African War. Following the slopes to where the low-lying cottages of Wendover begin to touch the meadows of the outstretching Vale, a town of wooden huts spreads itself within a park, the camp of an army. Thence morning by morning in sunshine or rain, soldiers have now for months past swarmed along the steep hillsides and over the flat summits, skirmishing with the forces of an imaginary enemy. On Sundays they may be met in friendly comradeship, in twos and threes among the juniper bushes above Ellesborough and in the beech-shaded lanes which run down towards the Kimbles. Just as on the eastern part of the range they wander among the oaks and the tall bracken of Ashridge so they roam round Hampden, the first soldiers since the Civil War to tread the remote highways of the Chilterns. They smoke their cigarettes lolling against the mysterious earthworks of Grim's Dyke, or resting on the grassy outlines of Cymbeline's Castle. Standing on these remains of prehistoric warfare successors of stalwart Englishmen of the past, these khaki-clad soldiers are not less courageous and resolute than Hampden's levies with their pikes and flintlocks:

"Thus men go,
The dropped sword passes to another arm
And different waters in the river flow."

The spirit of the race and its passion for justice and legality is unchanged; the patriotism of the manor house and of the grange is not lessened in comfortable dwellings which have sprung up on sunny slopes beside the beech woods, in the farmsteads in the bottoms and in the busy factories and many small houses which encircle the eighteenth century buildings of High Wycombe. This, and the townlets of the Chilterns now merged in a larger constituency, serve to emphasise the truth of Masefield's simple line:

"different waters in the river flow."

Its course, its volume, its quiet power are unchanged. Of this the Chilterns continually remind us, when roaming among the beech woods and clematis-lined lanes we respond to their haunting memories.—E. S. ROSCOE

A BIG SWARM OF BEES.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—This photograph of an enormous swarm of bees will probably interest your apicultural readers. The swarm occurred in my garden at Stavely, Westmorland, and astounded all who saw it.

The bees settled on the branch of an apple tree, and the swarm as seen in the picture measured about fifty-four inches from top to bottom. The wooden rail passing in front of the swarm is 4½ in. deep. A skep measuring 15 in. in diameter and 10 in. in depth held only two-thirds of the bees, and when hived there were still many bees on the flight-board unable to gain admittance, even when accommodated with eighty-four sections. I was unable to weigh this swarm, and have since regretted the fact.—J. H. SWAINSON.



FIFTY-FOUR SOLID INCHES OF BEES.

A FRESHWATER SEAHORSE.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Professor Roule of the Paris Museum has recently announced the discovery of a freshwater seahorse, named by him *Hippocampus Aimci*, in the Mekong above the falls, about one hundred and eighty miles from the sea. This is a very remarkable addition to our knowledge, as the whole group of seahorses, of which about fifty different kinds are known, was hitherto believed to be confined to salt water, although the allied group of pipe fishes includes a few freshwater representatives. There is hardly a family of fishes generally regarded as typically marine (deep sea forms excluded) which does not offer some exceptions, such as we find among the flat fishes, the sharks, the rays, etc.; but the seahorses were still without known exception. Professor Perrier, in commenting on Professor Roule's interesting communication, observes how prudent geologists must be in concluding from fossils as to the nature of ancient deposits, as, had a fossil hippocampus turned up in a sedimentary stratum of unknown nature, the presence of such a type of fish would almost certainly have been regarded as evidence of its estuarine origin.—G. A. BOULENGER.

A PRAIRIE PEST.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—One of the most troublesome rodents with which the farmer on the prairie has to contend is the Richardson's gopher. In spite of wholesale



INCONSPICUOUS IN THE DRY GRASS.

trapping and poisoning it is very plentiful, and seems to be extending its range. The photograph of one on the dry, brown grass gives a good idea of how well the colour harmonises with the surroundings. To encourage the farmers to set



A YOUNG CAPTIVE GOPHER.



IS IT MY TAIL YOU'RE WANTING?

out traps and poison, a small bounty is paid for each tail in some districts.—H. H. PITTMAN, Box 28, Wauchope, Saskatchewan, Canada.

A SPOILT YOUNG CUCKOO.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Surely it is a very rare thing to see a full grown young cuckoo being fed by all the tiny birds of the neighbourhood. I have watched one here for the last fortnight in the garden being fed by tits, robins, sparrows, flycatchers and chaffinches; and, although it can fly and is quite capable of looking after itself, it will call and call until the birds (to pacify it) are obliged to bring it food. What bird was its foster-mother I cannot say.—M. FREESTONE, The Cottage, North Cadbury, Somerset.

A STRANGE FOSTER-MOTHER.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I send you a photograph, which possibly you may be able to reproduce, of a very singular case of foster-mothering. The cow shown in the illustration lost her calf and the foal was deprived by death of its mother at the same time. Someone happily thought of putting the two bereaved ones together. The plan succeeded, as eighteenth century folk would have said, "to a wish"; the



THE COW AND ITS FOAL.

cow took instantly to the foal; the foal was happy and prospered exceedingly, and is now a fine, well grown horse. I do not happen to have heard of a similar incident, though I have known of many strange cases of fostering, such, for example, as a cat bringing up infant fox cubs.—H. A. BRYDEN.

SWANS STEALING CYGNETS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Some six or seven years since I went to Abbotsbury swannery. The birds were sitting and some hatched off. In a wire enclosure were some forty or fifty young cygnets, and I said to the keeper, "What are these here for," and he replied: "To keep up the stock, as they take one another's young, and in doing so kill them. You see those two broods just hatched going out into the fleet, they will very likely come back with only two or three or none."—VISITOR.

A CENTRAL BUREAU FOR DISTRIBUTING MEDICINAL HERBS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—With reference to Mr. Holmes' article on Medicinal Plants in your issue of July 29th, I desire to point out that this Association provides the "Central Bureau" suggested, to which all orders and offers of prices may be referred. The Association is in touch with centres of growers and collectors all over the country, and has contracts and orders for herbs, both dried and fresh, from the large wholesale houses. Any of your readers who desire further information or advice are invited to communicate with the Association at the address given below.—ALICE SANDFORD (Chairman), The Herb-Growing Association, 20 and 21 (sixth floor), Queen Anne's Chambers, Westminster, London, S.W.

THE FERN OWL AGAIN.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I enclose a photograph of a nightjar on its nest which, I think, shows how perfectly it harmonises with its surroundings, as noted by your correspondent, "R. Y.," in your issue of July 15th.—W. WILSON.



PROTECTED BOTH BY FORM AND COLOUR.